



Continuous Band Sealer Instruction Manual

Distributed By:

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Printed in the United States of America

General Information

Thank you for purchasing our HL-M1120LD continuous band sealer.

This owner's manual contains information relating to your band sealer machine. The manual will provide you with basic information concerning both operation and maintenance of your new machine. Please read it carefully as failure to do so may result in bodily injury and/or damage to the equipment.

Please fill in the information below. You will find the information on the machine identification plate. You will need this information when ordering replacement parts or making technical inquiries.

No part of this manual may be duplicated, reproduced, stored in a retrieval system, translated, transcribed, or transmitted in any form without the express prior written permission of Sealer Sales, Inc.

EQUIPMENT INFORMATION

❖ Model #

❖ Serial #

❖ Purchase Date:

❖ Reference #:

❖ Owner:

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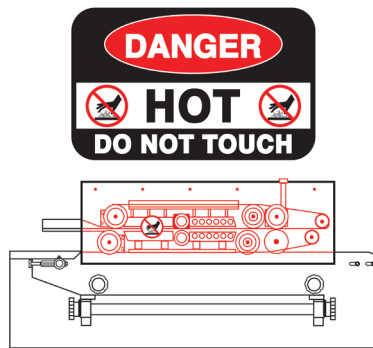
Safety Instructions



WARNING! *Below are general safety precautions and warnings that should be understood prior to setting up or operating your equipment. Read and fully understand all instructions and warnings prior to using this unit. Your safety is most important! Failure to comply with procedures may result in serious injury or property damage. Remember: **Your personal safety is your responsibility.***

Unsafe practices or unauthorized modifications could result in accidents or property damage. Failure to follow these safety rules and take necessary precautions can result in serious injury as well as damage to equipment.

- ❖ Never operate or service your band sealer until you have read this manual completely and understand it fully.
- ❖ Plug the band sealer into a standard 120 Volt, 60Hz wall outlet or surge protector. We highly suggest using a surge protector. Some special order units are 220 Volt, 50Hz. Make adjustments as necessary.
- ❖ Do not use the band sealer if the power cord, plug or any other parts are damaged. Do not allow the power cord to drape into your work area. Check that all parts are operating properly and perform the intended functions. Check for all other conditions that may affect the operation of your band sealer.
- ❖ Reduce risk of unintentional starting. Make sure the power switch is in the "OFF" position before plugging into the power source.
- ❖ Always disconnect sealer from power source before servicing, changing accessories or cleaning the unit.
- ❖ To provide protection against the risk of electrical shock, the power connection must be properly grounded at all times.
- ❖ Do not leave the sealer unattended when in use. Disconnect the sealer from the power source before leaving the work area.
- ❖ Band sealer is used solely for sealing thermoplastic materials. Using the machine for any other purpose can cause damage to the machine and operator.
- ❖ Always operate machine on a flat stable surface.
- ❖ While operating machinery, wear close-fitting clothing and tie back long hair to prevent any external items from getting caught in the machine. Do not wear jewelry when operating the band sealer.



- ❖ While machine is operating do not touch the heating and/or cooling blocks. Blocks are extremely hot and may burn your hands.



- ❖ While machine is in operation, do not place fingers, tools, or other foreign objects on or into the machine. Do not touch any moving parts while machine is operating. Fingers may get caught in between the gears / pinch points and cause significant injury.
- ❖ Thermoplastic bags and materials are hand fed into the machine. Place bag on the guide and carefully feed the bag through the band sealer. Fingers may be placed on the guide but do not allow fingers to touch any of the moving parts on the band sealer.
- ❖ Use emergency stop to turn off machine should material/bags get jammed into the machine. Carefully pull material out of the band sealer. Do NOT use fingers to touch any part of the machine.
- ❖ The band sealer is not water resistant or water proof. Spraying down the machine will damage machine or cause electrical shock. Do not submerge the band sealer in water or liquid.
- ❖ DO NOT operate band sealer in a corrosive or humid environment.
- ❖ Always keep the machine clean, lubricated and in good working condition. Follow any maintenance and lubrication procedures outlined in this manual. Make sure unit is disconnected from power source before cleaning.
- ❖ NEVER use any accessories or parts from other manufacturers. Machine should not be altered or modified using parts that are not genuine authorized parts. Doing so will VOID YOUR WARRANTY.
- ❖ Never leave the band sealer unattended. Be safe, disconnect the band sealer from power source before leaving work area.
- ❖ Always keep out of reach of children and pets.
- ❖ Close supervision is necessary when any machine is near children or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge . This sealer is NOT to be used by children or by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge.
- ❖ DO NOT use the band sealer outdoors.
- ❖ DO NOT use the band sealer while under the influence of drugs, medications or alcohol.

SAVE THESE INSTRUCTIONS - REFER TO THEM OFTEN AND USE THEM TO INSTRUCT OTHERS.

Introduction

Our band sealers are equipped with electronic temperature controllers and variable speed conveyors to seal all types of thermoplastic materials (PP, PE, stand up pouches, gusseted bags, moisture barrier bags, etc.). Seals are created using PTFE bands which maintain high seal quality and produce consistently strong, clean seals on all heat sealable bags. Because bags are placed on a conveyor system, the width of the bag does not matter. These versatile machines offer several adjustments which allow them to be used for a wide range of applications. These machines are used extensively in the food, medical, chemical, cosmetic, and electronic industries.

The HL-M1120LD is a standalone unit with locking casters providing easy mobility for the band sealer. The vertical configuration of the sealer makes the unit ideal for packaging small solid products (ex: powders, grains, coffee) and liquids. In addition, sealing using the vertical configuration also works best with stand up pouches.

The HL-M1120LD band sealer adopts dry ink coding designed to print date and lot codes at the seal line. Ink dries instantly upon contact with packaging materials and produces clear and legible characters. For HL-M1120LD, the standard font size is 18PT which allows for two-line printing. An optional 10.5PT font size which allows for three-line printing can be purchased separately. Please ask your distributor for more information.

Features of the HL-M1120LD Band Sealer

Your band sealer is equipped with a wide range of standard features and capabilities.

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- ❖ Simple to use – minimal operator training
- ❖ Fast warm up time
- ❖ Unit feeds right to left
- ❖ Rust inhibiting stainless steel construction
- ❖ Equipped with bag entry guide for easy bag feeding and straight seals
- ❖ Industrial grade safety emergency stop switch
- ❖ 10amp protection power surge breaker
- ❖ Equipped with photo sensor for optimal printing precision
- ❖ Dry ink coder for printing characters at the seal line
- ❖ Wide seal (8mm) to assure airtight seal
- ❖ PTFE sealing belts
- ❖ Extended forced-air cooling system with extra wide cooling bars and 6 heat transfer orifices
- ❖ One pair of brass sealing bars
- ❖ Sealing method – constant heat
- ❖ Adjustable 2-way pulley system for optimal stability and embossing clarity
- ❖ Knurled pressure rolls with variable pressure adjustment
- ❖ PID digital temperature controller 0-300°C (572°F) with dual alphanumeric displays (target & current temperature)

- ❖ Motorized rubber conveyor with speed control
- ❖ Capable of speeds up to 394 inches/minute
- ❖ Includes stainless steel pedestal with locking casters

How Does the Band Sealer Work?

Basic

Principles

HL-M1120LD is easy to use. To seal, adjust temperature and place bag on conveyor

Our band sealers are comprised of a stainless steel frame, speed adjusting mechanism, sealing temperature control system and transmission system. Turning on the heat for the band sealer will cause a rapid rise in the temperature of the heating blocks. Required temperature and speed can be adjusted via the temperature controller and speed adjusting device. Plastic material to be sealed is placed on the guide and conveyor. Conveyor will then take the material between the two heating blocks to fuse the material together. Material will then pass through the cooling blocks to allow the material to congeal. Finally, a photoelectric sensor will direct the dry ink coder to print a clear and legible print at the seal line.

The motor drives the sealing belts, drive belts and conveyor simultaneously.

Specifications

	HL-M1120LD	HL-M1120LD_LtoR
Power	110V/60Hz	
Motor Power	230W (1/3 HP)	
Sealing Power	300W x 2	
Sealing Speed	0-394 inches/minutes	
Sealing Width	10mm	
Temperature Range	0-300°C (572°F)	
Feed Direction	Right to Left	Left to Right
Conveyor Size	55" x 10"	
Max Conveyor Load	33-lbs	
Min/Max Height of Bag	3.9" / 27.0"	
Printing Heating Power	40 x 2 (W)	
Character Size	3x5x7mm / 18PT – 2 lines 2x3x7mm / 10.5PT – 3 lines (additional option available)	
Printing Colors	Black (Option: White)	
Dimensions	57" x 27" x 58"	
Weight	450lbs	

Getting to Know your Band Sealer

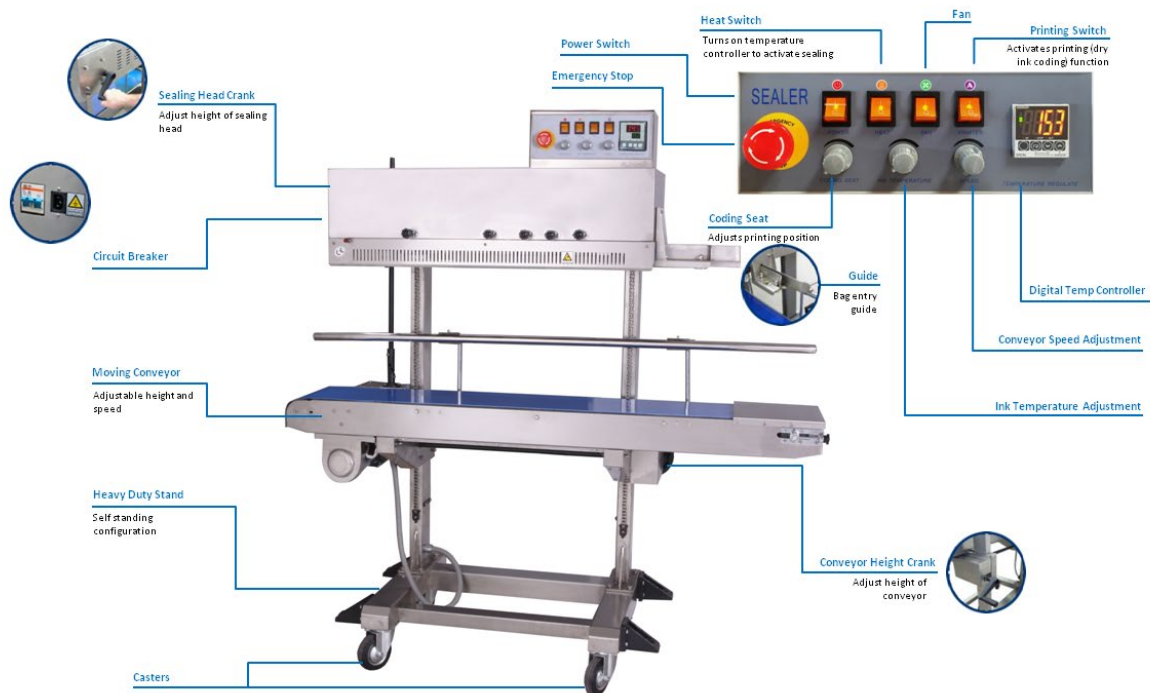


Figure 1. HL-M1120LD Band Sealer Overview

Band Sealer Diagram

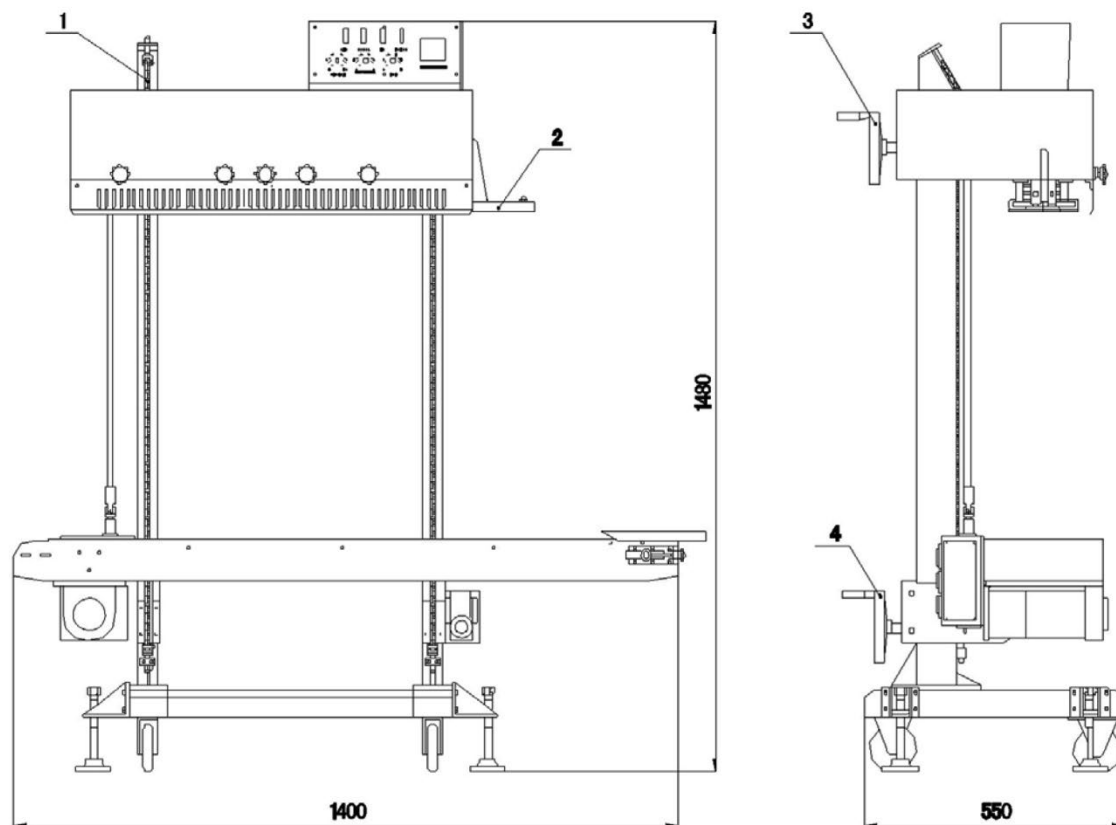


Figure 2. HL-M1120LD (1) Lifting Chain, (2) Guide, (3) Adjusting Wheel for Machine Head, (4) Adjusting Wheel for Conveyor Table

Electrical Circuit Diagram

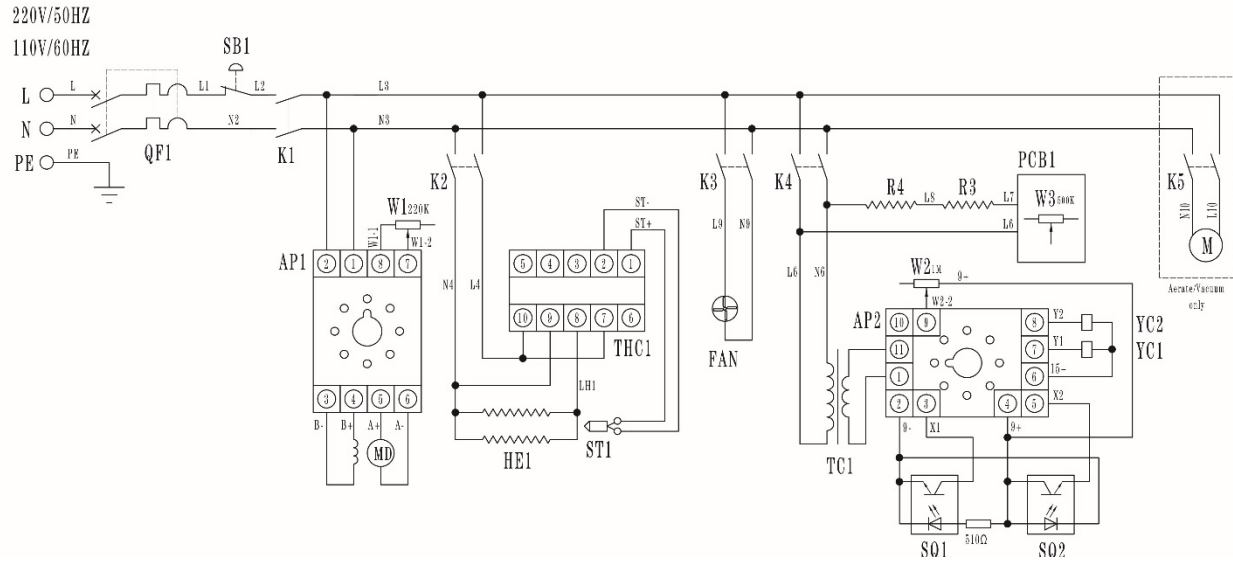


Figure 3. Electrical Circuit Diagram. (QF1) High Rupture Switch, (SB1) Emergency Stop Switch, (K1) Switch/Power, (K2) Switch/Heat, (K3) Switch/Fan, (K4) Switch/Printer, (K5) Switch/Aerating-Vacuum (W1) Speed-Regulating Potentiometer; (W2) Coding Position Potentiometer, (W3) Temperature-Regulating Potentiometer; (HE1) Heating Element of Sealing, (R3/R4) Heating Element of Ink Roller; (MD), Speed adjusting Motor; (M) Aerating/Vacuum, (FAN) Fan, (TC1) Transformer, (YC1) Electromagnetic Clutch, (YC2) Electromagnetic Brake, (SQ1) Groove Sensor, (SQ2) Photoelectric Sensor, (THC1) Temperature Controller, (ST1) Thermocouple, (AP1) Speed Adjusting PC Board, (AP2) Main Control PC Board, (PCB1) Temperature Adjusting PC Board

Warranty

Sealer Sales ("Sealer") provides limited warranties for its non-consumable products subject to these Terms and Conditions. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. Any warranties implied by law shall in no event extend beyond the duration of the express warranty offered, if any. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some products may also be covered by a manufacturer's warranty that requires these items to be sent directly to the manufacturer for replacement or repair.

Sealer warrants its non-consumable products against defects in materials and workmanship under normal use for the following warranty periods:

- ❖ 180 (one hundred eighty) days for equipment, excluding portable sealers and heat guns
- ❖ 90 (ninety) days for portable sealers and heat guns
- ❖ 60 (sixty) days for non-consumable parts and repairs

The warranty period begins on the date of purchase by the initial purchaser.

Sealer does not warrant consumable parts or products, including, but not limited to, replacement kits, heating elements, PTFE insulators, silicone/compression rubber, and flexible packaging.

Service Provided

Sealer has no obligation to repair, replace, or refund a product until the customer returns the product in question to Sealer. If a defect arises and a valid claim is received within the warranty period, Sealer will, at its option and to the extent permitted by law either: (1) repair the hardware defect at no charge, using new or refurbished replacement parts; (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts; or (3) provide a refund. Sealer, to the extent permitted by law, shall have the sole discretion to determine which service option it will provide and is not obligated by the terms of this warranty to provide more than one service option.

Exclusions

This Limited Warranty only applies to products purchased directly from Sealer. Sealer does not warrant that the operation of the products will be uninterrupted or error free. Sealer is not responsible for damage arising from failure to following instructions related to the use of the products.

The Limited Warranty does not apply to: (a) damage caused by use with products not approved by Sealer; (b) damaged caused by accident, abuse, misuse, improper storage, theft, vandalism, natural acts of God, or other external causes; (c) damage caused by operating the product outside of its permitted or intended uses; (d) damaged caused by service performed by anyone other than Sealer or an authorized representative of Sealer, (e) damaged caused by improper maintenance or lack of maintenance; (f) damage or loss in functionality caused by modification or alteration of any parts without Sealer's permission; (g) consumable parts; (h) cosmetic damage; or (i) ordinary wear and tear.

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product

Limitation of Liability

THE MAXIMUM LIABILITY OF SEALER UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, SEALER IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. THIS LIMITED WARRANTY GIVES THE CUSTOMER SPECIFIC LEGAL RIGHTS. THE CUSTOMER MAY ALSO HAVE RIGHTS WHICH VARY FROM STATE TO STATE. IN SOME STATES, CERTAIN DISCLAIMERS AND LIMITATIONS MAY NOT APPLY TO YOU. TO THE EXTENT THIS LIMITED WARRANTY IS INCONSISTENT WITH LOCAL LAW THIS STATEMENT SHALL BE MODIFIED TO BE CONSISTENT WITH SUCH LOCAL LAW. If any term or condition of this warranty is held to be illegal, unenforceable or against public policy, the legality or enforceability of the remaining terms shall not be affected or impaired.

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW; SEALER IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS OR ANY BREACH OF WARRANTY OR CONDITION, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND REGARDLESS OF WHETHER SEALER WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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IF ANY PRODUCT TO WHICH THIS LIMITED WARRANTY APPLIES IS A "CONSUMER PRODUCT" UNDER THE MAGNUSON-MOSS WARRANTY ACT (15 U.S.C.A. §2301, ET SEQ.) OR OTHER APPLICABLE LAW, THE FOREGOING DISCLAIMER OF IMPLIED WARRANTIES SHALL NOT APPLY TO YOU, AND ALL IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR THE PARTICULAR PURPOSE, SHALL APPLY AS PROVIDED UNDER APPLICABLE LAW.

Obtaining Warranty Service

If you believe the product you purchased is not functioning properly due to a defect covered by this warranty, please contact Sealer directly via telephone, U.S. mail, or e-mail using the contact information listed on our website. A Sealer representative will help determine whether your product requires service and, if it does, will inform you how service will be provided. You must assist in the diagnosis process by providing any information or requested documentation required by Sealer.

Sealer may (a) provide warranty at its headquarters location, (b) request that you ship the product to its headquarters for service, or (c) ship you new or refurbished replacement products or parts to enable you to complete repairs on your own. Sealer does not provide on-site warranty service for any products or parts. If a product is shipped to Sealer for warranty repair, the customer must pay for shipping costs. If it is decided that a product should be returned directly to Sealer, the product should be properly packed, preferably in the original packaging, for shipping.

When a product or part is exchanged or replaced, any replaced item becomes the property of Sealer.

Service options and service times may vary depending on the complexity of the product, the nature of the defect, and/or the availability of replacement parts. Sealer may require proof of purchase details before providing warranty service.

Installation

Important

Read this manual carefully, and make it available to everyone connected with the supervision, maintenance, or operation of this machine. Additional copies are available at your request. Be very careful when operating, adjusting, or servicing this equipment. If in doubt, stop and obtain qualified help before proceeding.

Installation

Place the band sealer in the desired location with the required electrical power source available. (See power requirements.) Make certain that proper electrical wiring is provided to guard against low voltage. If the voltage is too low, the equipment will not function properly.

Finding the proper location is a most important function of the initial set-up. One must take several factors into consideration:

- ❖ Adequate power source
 - ❖ Relationship to source of product
 - ❖ Relationship to band sealer
 - ❖ Relationship to any conveyors necessary to transport finished product
 - ❖ Convenience of operator
1. Your new HL-M1120LD band sealer comes packaged in a heavy duty crate to protect it. If your machine does not arrive in this condition, write on shipping paperwork that outside of box is damaged. Concealed damage may have occurred.
 2. Remove the nails.



Figure 4. HL-M1120LD Crate

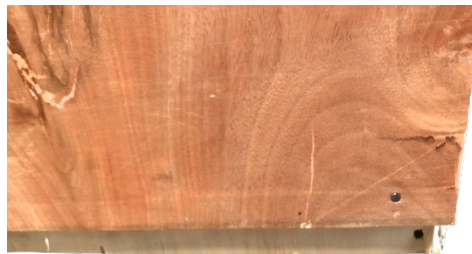


Figure 5. HL-M1120LD Crate

3. Remove the protective plastic covering the machine.
4. Remove bolts holding machine to crate.



Figure 6. Bolts locking HL-M1120LD to crate.

5. Carefully check the contents against the spare parts list in the toolbox (see Spare Parts List on page 54). Once you have determined that all of the parts have arrived in good order set up can proceed. If any parts are missing or appear to be damaged, please notify your distributor or Sealer Sales AND your freight company at once.



Figure 7. HL-M1120LD Unwrapped

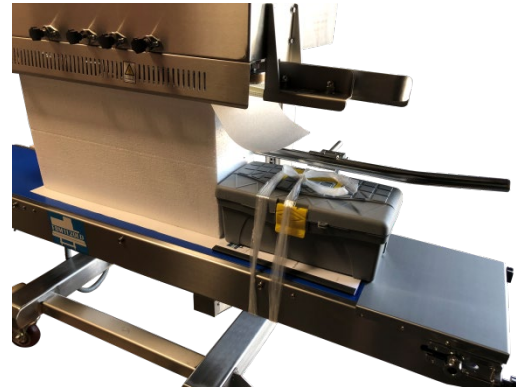


Figure 8. HL-M1120LD Spare Parts Toolbox

Operation

Operation Set-up

1. Our machines are equipped with a three-prong grounded plug. Make sure the plug is well-connected in the socket to ensure safe operation.
2. Make sure the circuit breaker is in the “ON” position. (Levers pointing up)
3. First time operation. Allow the machine to pre-heat by running at a low temperature for a few minutes. This would apply if the machine has not been in operation for a long time. The machine can sometimes be damp from storage or shipment and running at a low temperature will dry out any residual moisture.
4. Adjust the height of the conveyor and machine head based on the bag requirements.

Operation



Figure 9. Control Panel of HL-M1120LD

1. Our machines are equipped with a three-prong grounded plug. Make sure the plug is well-connected in the socket to ensure safe operation.
2. Make sure the circuit breaker is in the “ON” position. (Levers pointing up)
3. Turn Power, Heat (Seal), Fan, and Printer switches to the “On” position. Belts and conveyor will begin to move simultaneously.
4. Adjust the conveyor speed.

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5. Adjust the temperature controller to the temperature desired to seal your material. Temperature settings will vary based on bag material and thickness. If you are unsure what temperature setting to use, we recommend starting at a low temperature (150°C) and gradually increase to a temperature that will seal your material. We highly discourage sealing material at a temperature above 200°C. **Please note: Temperature will be in Celsius, not Fahrenheit.** The temperature controller cannot be displayed in Fahrenheit.

The PV value is the actual temperature and the SV value is the desired temperature setting. The SV value can be viewed by pressing the  button.



Figure 10. HL-M1120LD Temperature Controller

- a. To set the temperature, press the  button. The SV temperature will be displayed. The SP light will be on to show the SV temperature.
 - b. Press the  and  button to change temperature setting.
 - c. Press the  button to save the temperature settings.
 - d. Wait until the PV temperature matches the SV temperature which should take approximately 5-10 minutes.
 - e. Check our YouTube channel (<https://www.youtube.com/user/sealersales>) for a video demo.
 - f. **Please note:** Temperature will be in **Celsius**, not Fahrenheit. Do not attempt to make additional adjustments to the temperature controller besides the temperature. The temperature controller CANNOT be displayed in Fahrenheit and is ALWAYS in Celsius. **Please do not set the temperature controller above 200°C.** Please contact your local distributor if you need assistance.
6. Most bag types will not need an adjustment and we suggest running your material through the band sealer without making any adjustments. If needed, adjust the pressure knobs ([Figure 32, Item #16](#)) to adjust the clearance between both heating and cooling blocks based on the thickness of your bag material.

7. Place material on the guide (Figure 32, Item #5) and allow the band sealer to pull your material through. Make sure your material is flat on the guide. While the material is moving through the band sealer, do not push or pull the material as this will cause irregular sealing.
8. If the sealing belt is running off the guide wheels, make adjustments to the screws that are found on the driven wheel seat (Figure 34, Item #28)

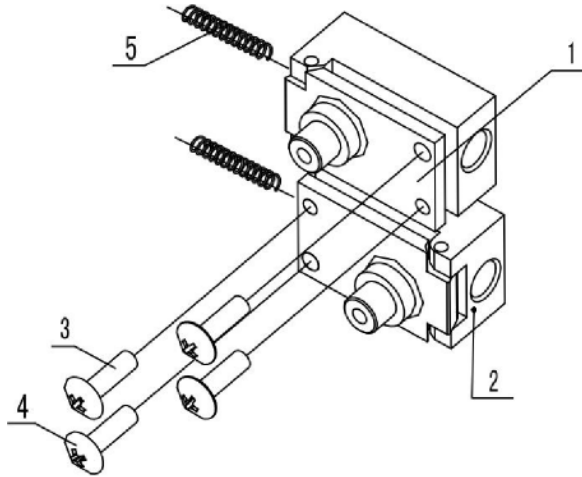


Figure 11. (1) Driven Wheel Seat (Adjusting Block), (2) Driven Wheel Seat (Adjusting Block), (3)/(4) Adjusting Screws, (5) Springs

9. Emergency Stop – Press the emergency stop to turn off the machine. In order to restart the machine, you must release the emergency stop by turning the knob 120° clockwise.
10. To shut down, turn off the heater switch and allow the temperature of the machine to drop before turning off the power and fan switches. ***Following this shut down procedure will significantly prolong the life of machine and sealing belts.***

Sealing Optimization

1. Sealing performance can be adjusted with the sealing temperature and sealing speed. The higher the speed the less exposure the material to heating blocks and therefore a higher temperature will be required to seal the material.
2. Try a variety of different sealing temperatures and conveyor speeds to get the optimal seal for your material.

Printing Operation - HL-M1120LD

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HL-M1120LD is equipped with a dry ink coding feature capable of printing characters at the seal line. Ink dries instantly upon contact with packaging materials and produces clear and legible letters/numbers. Standard font size is 18PT which allows for two-line printing up to 20 characters per line. An optional print wheel which allows for 40 characters per line is available to be purchased separately. In addition, we also carry 10.5PT font size which allows for three-line printing which can also be purchased separately. Ask your distributor for more details. Check our YouTube channel (<https://www.youtube.com/user/sealersales>) for a video demo.



Figure 12. Standard font size - 18PT

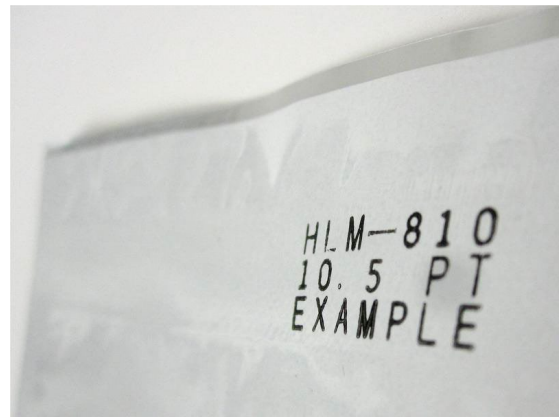


Figure 13. Optional 10.5PT font size available for purchase

1. **Removing Print Wheel.** To remove the printing wheel from the base, push the red handle in and turn clockwise until you feel the handle unlock. (See [Figure 14](#) and [Figure 15](#) for locked and unlocked positions). You may need to turn the wheel a few times until the red handle unlocks and pops out of its locked position.

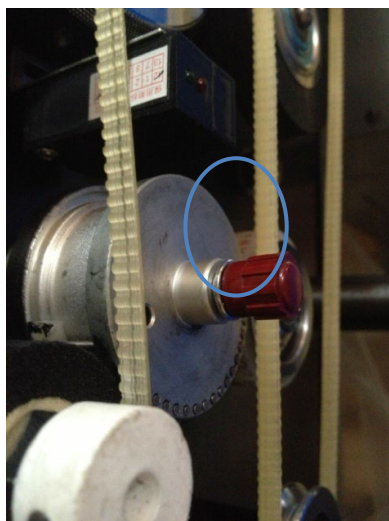


Figure 14. Locked Handle Position

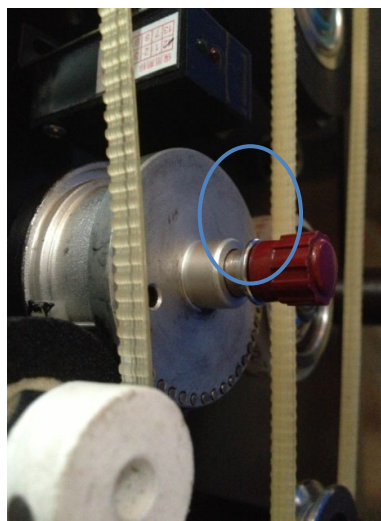


Figure 15. Unlocked Handle Position

2. **Installing Types/Characters on Print Wheel.** Place selected characters in the grooves of the printing wheel. Be sure to insert the characters from right to left to ensure actual imprint prints correctly on your packaging material. Once completed, insert the silicone pin at the top of the printing wheel to hold the characters in place.



Figure 16. Place characters from right to left.



Figure 17. Place silicone pin to lock characters in place.

3. **Installing the Print Wheel.** To insert the spring-loaded print wheel into the print wheel base, ensure that the pins on the printing wheel are aligned with the notches of the print wheel base. Gently insert the print wheel into the base. Lock the print wheel by pushing the red handle in until you feel the handle lock into place.



Figure 18. Ensure two holes and pins line up with the base

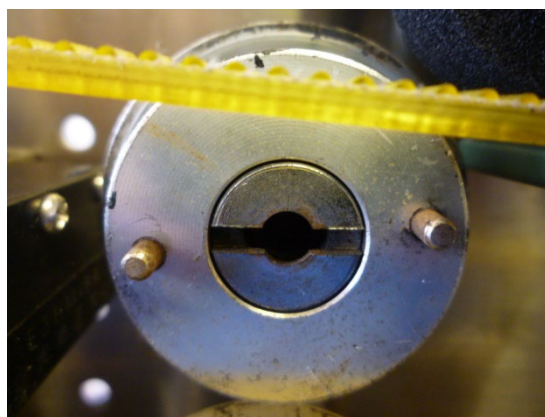


Figure 19. Ensure two holes and pins line up with the base

1. **Install Ink Roller into the Ink Roller Holder.** Remove the metal ring found on the ink roller holder using an allen wrench. Place the ink roller onto the ink roller holder and place the metal ring back on the ink roller holder to hold the ink roller in place. Please note that for 30mm wide ink roller, the metal ring will not be used.



Figure 20. Remove metal ring found on the ink roller holder



Figure 21. 15mm ink roller installed on ink roller holder

2. **Insert Ink Roller in the Ink Wheel Heating Block.** When inserting the ink roller, ensure the ink roller lines up with the type on the printing wheel. If the ink roller is pushed in too far, the printing wheel will not print correctly. *Note: Do not allow the ink roller to heat continuously when machine is not in use as heating block may melt the ink roller.*

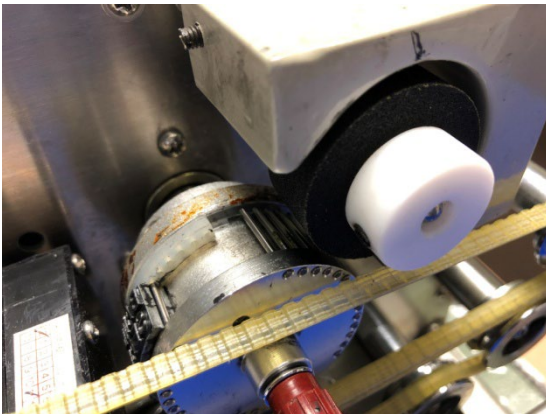


Figure 22. Correct Ink Roller Position

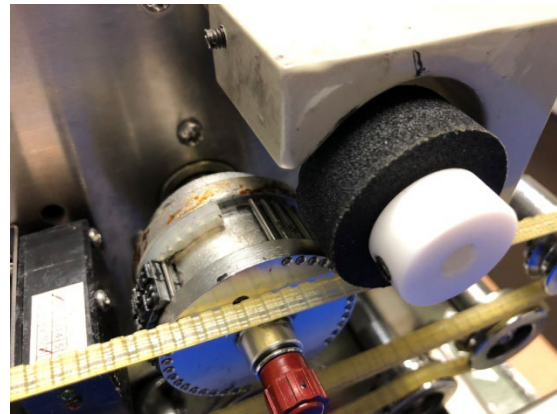


Figure 23. Incorrect Ink Roller Position

Test the ink roller position relative to the printing wheel. Place your finger under the photoelectric sensor. The sensor light will turn green and allow the printing wheel to rotate.

3. **Make Adjustments to Ink Wheel Adjusting Device.** As the print wheel rotates, check that the printing wheel makes contact with the ink roller. Make adjustments using the ink wheel adjusting device ([Figure 24, Item #5](#)) if necessary. Turning the adjusting screw clockwise will move the ink roller away from the print wheel and turning the adjusting screw counterclockwise will move the ink roller closer to the print wheel.

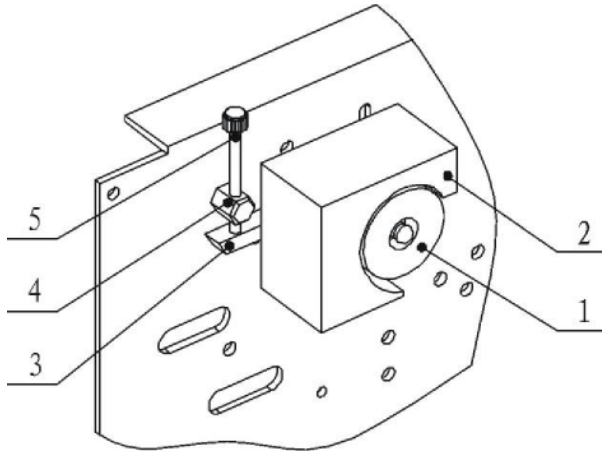


Figure 24. (1) Ink Roller, (2) Ink Roller Heating Block, (3) Swing Pole, (4) Adjusting Strut, (5) Ink Wheel Adjusting Device

4. **Make Adjustments Between Printing Wheel and Silicone Wheel.** The typesets/characters on the printwheel should only touch the silicone wheel during the printing process. The characters should not touch the silicone wheel at any other time. If the band sealer is used to seal relatively thicker materials, the screw (Figure 25, Item #4) should be loosened. Rotate the eccentric sleeve (Figure 25, Item #3) to ensure the characters/typesets slightly touch the silicone wheel's surface. Refasten the screw after making adjustments.

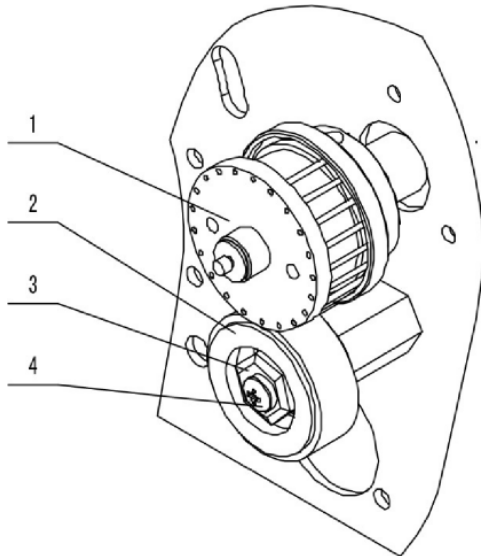


Figure 25. (1) Printing Wheel, (2) Silicone Wheel, (3) Eccentric Sleeve, (4) Screw

5. **Setting Printing Temperature.** We recommend setting the ink temperature on the higher end. Allow 5-10 minutes for the ink heating block and ink roller to reach the correct temperature. **Note:** *If band sealer is not in use right away, do not leave ink roller in the unit while temperature is on. This may result in the ink roller melting and producing messy print.*
6. **Adjusting Printing Position.** The coding seat knob determines printing position on your material. For example, if you want to print on the left side of your bag, turn the coding seat to its

lowest setting (or counterclockwise). If you want to print on the right side of the bag, turn the coding seat to a higher setting (or clockwise).

Printing Optimization

1. Print quality will be determined by the degree of ink melting, distance between the ink roller and printing wheel and distance between the silicone wheel and printing wheel.
2. Over time, decrease the gap between the ink roller and printing wheel.
3. A newer ink roller will require a lower temperature vs. an older ink roller. Make adjustments to ink temperature as necessary.
4. Ensure there is adequate pressure on the silicone wheel (**Part #BS-57A**) by the printing wheel. We suggest using factory default settings before making any adjustments. Adjustments may be needed based on material thickness.
5. If the printing wheel rotates and there is no thermoplastic material running through the band sealer, excess ink will rub off on the silicone wheel. Clean the silicone wheel with a shop cloth and silicone spray to remove any excess ink.
6. *Remove the ink roller from unit until sealer is ready for use. If ink roller is left in the machine while not in use, this may result in melting of the ink roller and messy print. To clean, wipe down belts, silicone wheel, and other parts with silicone spray and cloth.*

Maintenance

The following maintenance procedures should be followed to ensure the longevity of your HL-M1120LD band sealer.

Inspection and Cleaning

1. Inspect your machine daily.
2. Check if there is any foreign matter or dirt adhering to the band sealer.
3. To clean your band sealer, wipe down your sealer with silicone spray and a shop cloth. Do not apply silicone directly to your sealer. Definitely DO NOT wash down your machine with water.

Sealing and Drive Belts

**Scan QR Code for
Video Demo**



1. Check and replace the belts as necessary. Both the sealing and drive belts are consumable items. Replace sealing belts when there are burn marks or if the belts become hard and brittle. Replace drive belts when the belts break or become badly cracked.
2. To change out the belts, make sure the machine is turned off.
3. Remove the safety cover.
4. Remove the drive belts.
5. To remove the sealing belts, push on the adjustment blocks (Figure 34, Item #30) and the sealing belts should easily slip off.
6. Put new sealing and/or drive belts back on the machine. Test the machine, making adjustments as necessary.
7. Replace the safety cover.
8. Check our YouTube channel (<https://www.youtube.com/user/sealersales>) for video demo.

Turbocase Maintenance

1. Remove dust and clean motor at regular intervals. Avoid contact with alcohol, gasoline and benzene chemicals.
2. The turbocase should be oiled monthly with 50g 20# oil by:
 - a. Remove the back cover.
 - b. Locate the turbocase and unscrew the cap. Replenish any depleted gear oil with 50g 20# oil.
3. The carbon motor brush (**Part #BS-29A_HL-M1120LD**) is designed to be used 2,500 hours continuously. Replace carbon brush at regular intervals.

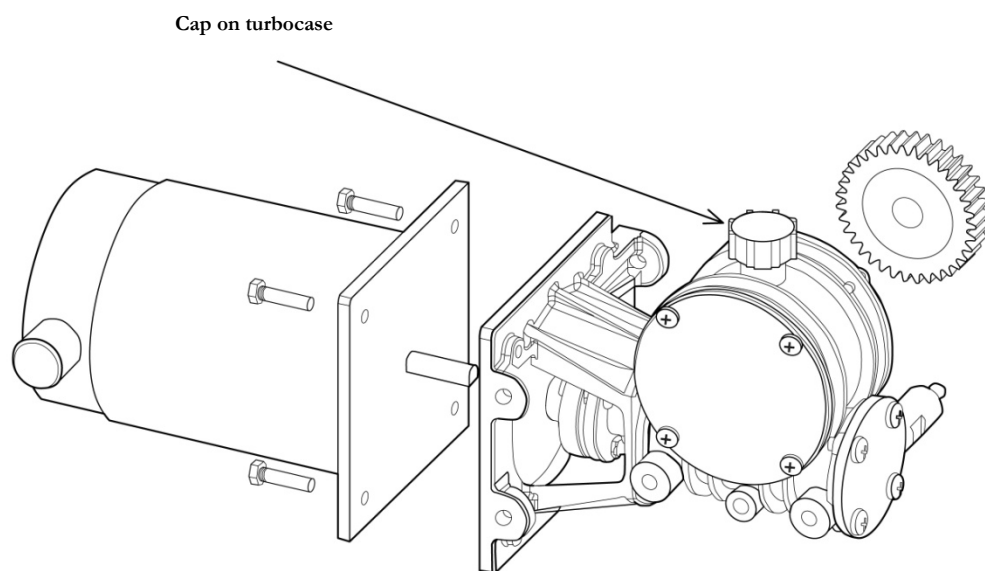


Figure 26. Turbocase cap

Printing Maintenance

HL-M1120LD band sealers are equipped with an ink temperature potentiometer which is attached to a PC Board. This part controls the temperature that is transmitted to both the ink heating block as well as the printing wheel, located behind the ink temperature knob. [\(Figure 30, Item #12\)](#) You should change the ink temperature potentiometer w/ PC Board when both ink heating block and printing wheel on your band sealer are not achieving optimal heat temperatures.

1. Turn off and unplug your band sealer.
2. Remove ink temperature knob, remove the washer that holds the ink temperature potentiometer on the panel.



Figure 27. Remove Ink Temperature Knob



Figure 28. Remove Washer Holding Ink Temperature Potentiometer

3. Remove the band sealer display panel. There should be six screws to remove.
4. Unplug the ink temperature potentiometer and plug in a new ink temperature potentiometer. Make sure the part is plugged in properly and tight.

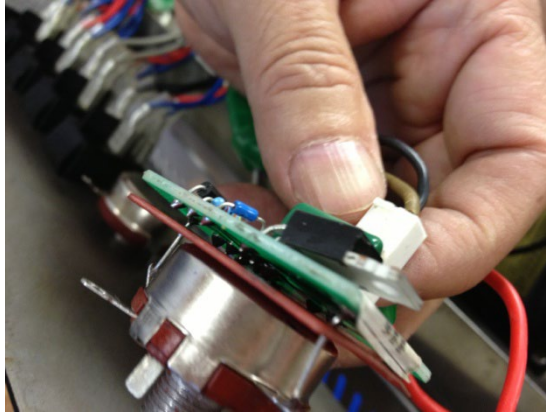


Figure 29. Unplug Ink Temperature Potentiometer w/ PC Board and Replace with a New Ink Temperature Potentiometer w/ PC Board

Parts Diagram

To order spare parts, please use diagram and part #s below:

Figure 30 – Controller Box

Figure 32 – Sealer Body

Figure 34 – Sealer Body Front

Figure 37 – Sealer Body Back

Figure 39 – Heating/Cooling Blocks & Dry Ink Coding Function

Figure 41 – Conveyor Table

Figure 43 – Sealer Rack

Figure 45 – Turbocase (Gear Box Assembly)

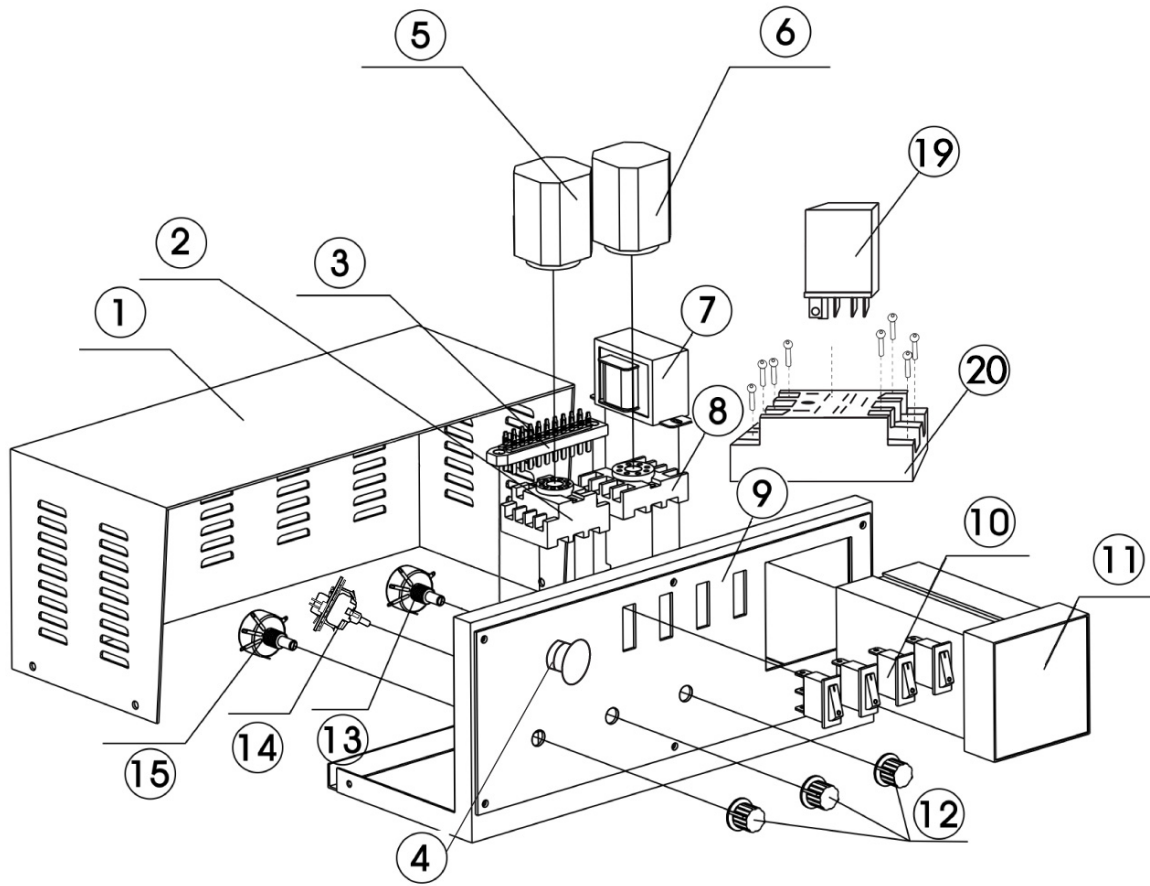


Figure 30. Controller Box

Figure 31. Controller Box

Item #	Part #	Quantity	Description	Comments
1		1	rear cover of electric cabinet	
2	BS-45B	1	PF113A relay holder	
3	FRM-1120C-56	1	20 pin socket	
4	BS-22A	1	emergency stop	
5	BS-52C	1	main control PCB	
6	BS-52A	1	speed regulating PCB	
7	BS-66A	1	transformer BK-10/220-13.5V	
8	BS-45A	1	PF083 relay holder	
9		1	control panel	
10	BS-22	1	control switch	specify large or small
11	TMC-XMTE-1000-2	1	temperature controller	determine version by taking temp controller out
	TMC-XMTE-1000-2-O	1	temperature controller	determine version by taking temp controller out
	TMC-E5CSL-QTC-FRM-1120	1	temperature controller	
12	BS-25A	1	knob	
13	BS-25	1	speed potentiometer 100K	
14	BS-50A	1	ink temperature potentiometer wih pc board	
	BS-25	1	potentiometer 100K	
15	BS-51	1	coding potentiometer 1.0M	
19	R-JQX-13F	1	Relay	Model: NXJ/2ZH(D)
	R-JG3NA	1	Relay	
20	BS-74A	1	Seat for relay	

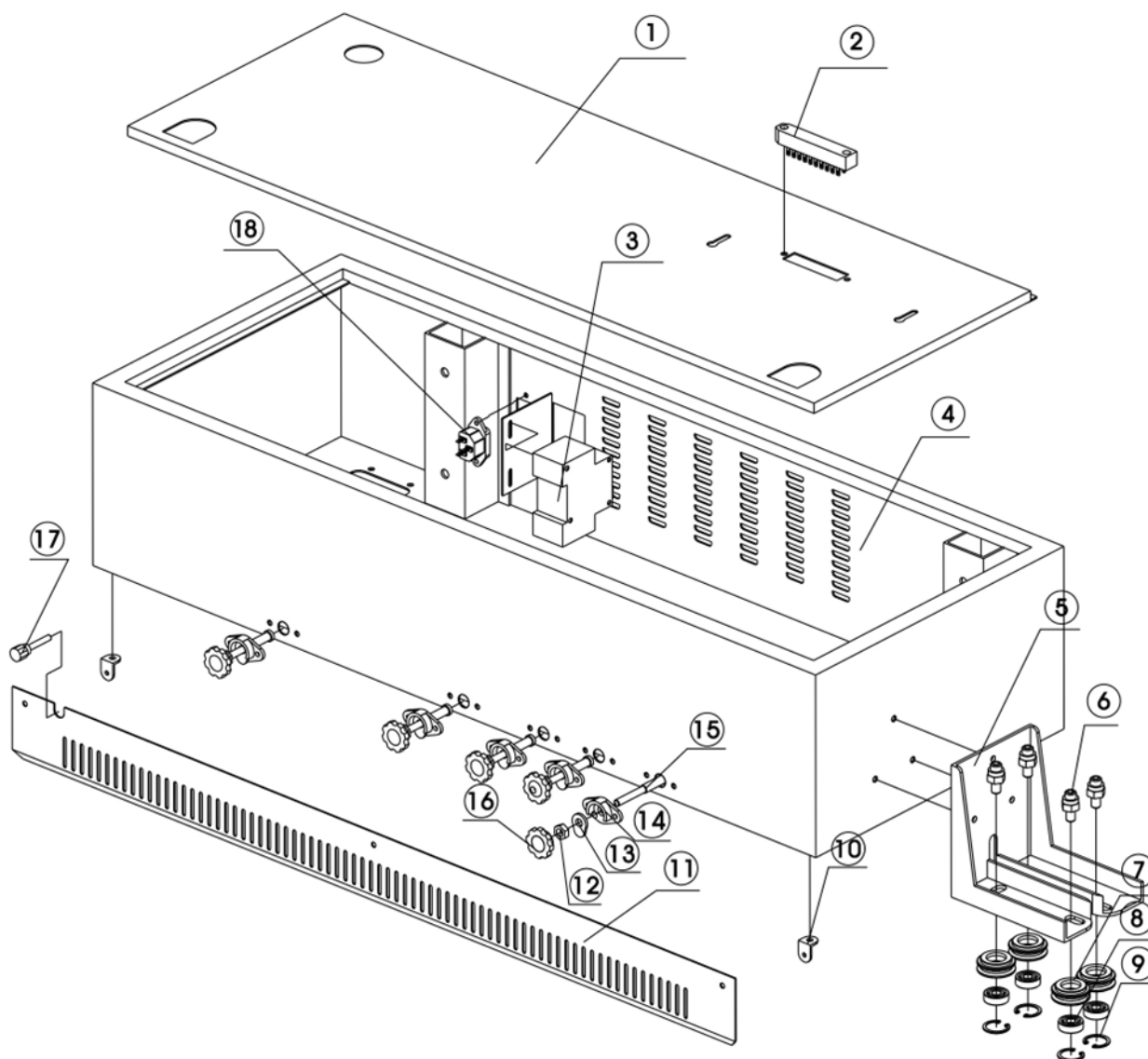


Figure 32. Sealer Body

Figure 33. Sealer Body

Item #	Part #	Quantity	Description	Comments
1		1	upper cover of housing	
2	BS-14	1	socket connector	
3	BS-27	1	DZ47-2P/5A small breaker	
4		1	housing	
5		1	idler pulley support / guide	
6		1	idler pulley shaft	
7	FRM-1120LD-6a_gen 1.0 or FRM-1120LD-6a_gen2.0	1	idler pulley	Includes #7, 8, 9
8	FRM-1120LD-6a_gen 1.0 or FRM-1120LD-6a_gen2.0	1	bearing	Includes #7, 8, 9
9	FRM-1120LD-6a_gen 1.0 or FRM-1120LD-6a_gen2.0	1	circlip	Includes #7, 8, 9
10		1	support of guard plate	
11		1	guard plate	
12		4	hexagon nut	
13	FRM-1120C-28A, 28B, or 28C	4	adjusting steel disc	(Includes #13-16) A = 65mm, B = 77mm, C = 92mm
14	FRM-1120C-28A, 28B, or 28C	4	screw holder	(Includes #13-16) A = 65mm, B = 77mm, C = 92mm
15	FRM-1120C-28A, 28B, or 28C	4	dolly bar	(Includes #13-16) A = 65mm, B = 77mm, C = 92mm
16	FRM-1120C-28A, 28B, or 28C	4	knob of screw	(Includes #13-16) A = 65mm, B = 77mm, C = 92mm
17	BS-62	1	adjusting knob for ink roller's swing pole	

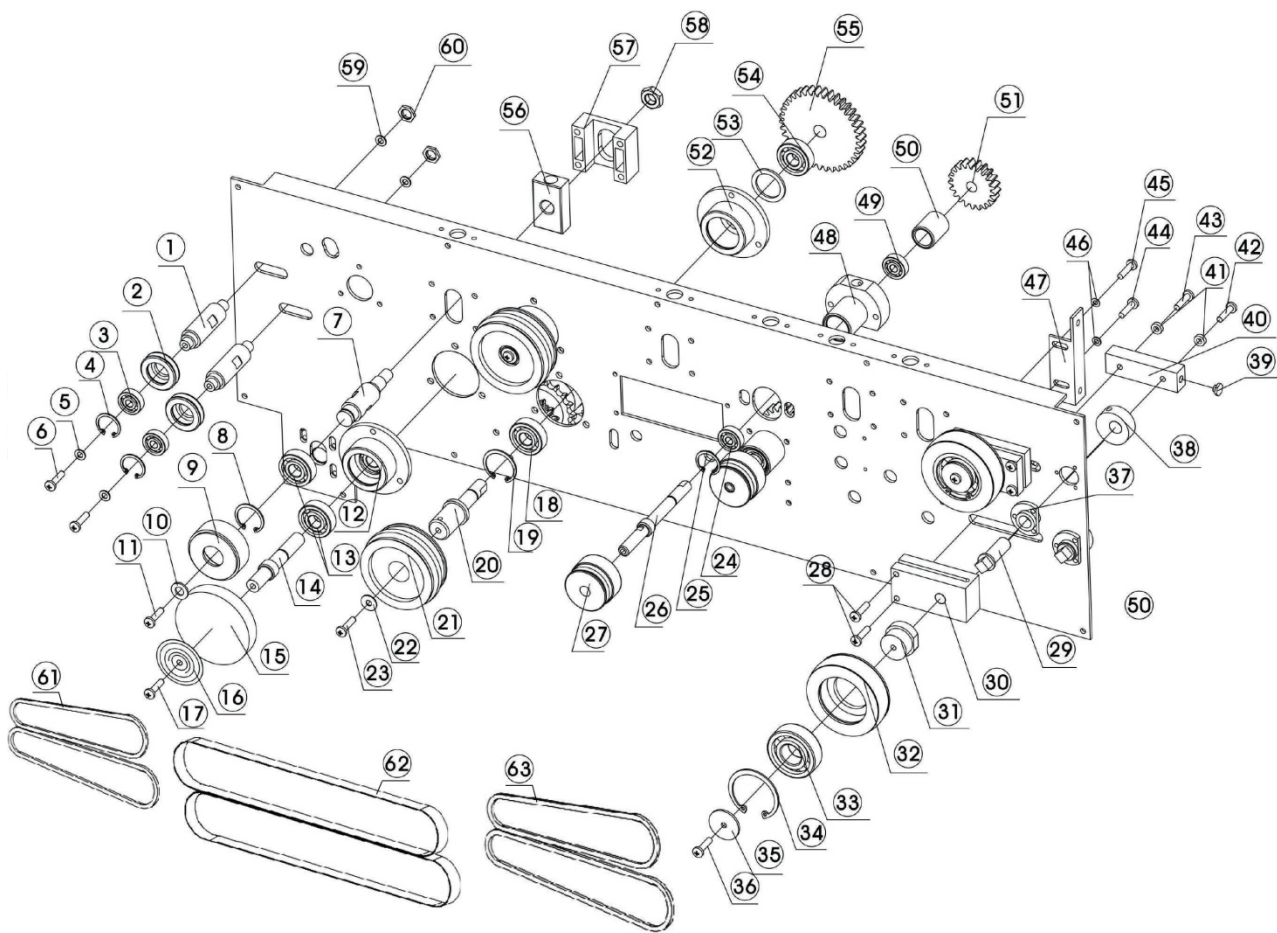


Figure 34. Sealer Body Front

Figure 35. Sealer Body Front (1 of 2)

Item	Part #	Quantity	Description	Reference	Comments
1	HL-M1120LD-6b	2	small pulley shaft	106002	
2	FRM-1120C-6A	2	small pulley	106003	Includes #2-4
3	FRM-1120C-6A	2	bearing (626)	GB/T276-1994(626)	Includes #2-4
4	FRM-1120C-6A	2	circlip for hole	GB/T893.1-1986	Includes #2-4
5	Washer-M5x16	2	flat washer	GB/97.1-2002	M5x16
6	Screw-M4x8	2	screw	GB/T818-2000	M4x8
7		1	embossing wheel shaft	106006	
8	FRM-1120C-3	1	circlip for hole	GB/T893.1-1986	Includes #8, 9
9	FRM-1120C-3	1	embossing wheel	106007	Includes #8, 9
10	WasherM5x16	1	flat washer	GB/T97.1-2002	M5x16
11	Screw-M4x8	1	screw	GB/T818-2000	M4x8
12					
13					
14		1	silicone wheel shaft	106011	
15	FRM-1120C-2	1	silicone wheel assembly	106010	
16		1	silicone wheel cover		
17	Screw-M4x8	2	screw	GB/T818-2000	M4x8
18	FRM-1120C-6-50-56		bearing (6201)	GB/T276-1994(6201)	Includes #18-20, 52-54
19	FRM-1120C-6-50-56		circlip	GB/T893.1-1986	Includes #18-20, 52-54
20	FRM-1120C-6-50-56		driving wheel shaft		Includes #18-20, 52-54
20	FRM-1120C-6-53		driving wheel shaft		
21	FRM-1120C-6	2	driving wheel	106012	
22	Washer-M5x28		flat washer		M5x28
23	Screw-M4x8		screw	GB/T818-2000	M4x8
24	Bearing_6900Z		bearing (6201)	GB/T276-1994(6201)	
25	Circlip-22mm	1	circlip for shaft (upper pressing wheel)		Ø10 x Ø 22 x 6
	Circlip-26mm	1	circlip for shaft (Lower pressing wheel)		Ø10 x Ø 26 x 6
26	HL-M1120LD-21-26	1	upper pressing wheel shaft	106023	
	HL-M1120LD-21-U-24-27	1	Upper pressing wheel shaft assembly	Upper	Includes #24, 25, 26, 27, 48
	HL-M1120LD-21-L-24-27	1	Lower pressing wheel shaft assembly	Lower	Includes #24, 25, 26, 27, 48
27	HL-M1120LD-21_gen1.0	2	pressing wheel - gen 1.0 #980	106025	
	HL-M1120LD-21_gen2.0	2	pressing wheel - gen 2.0 #960		
28	Screw-M4x8		screw	GB/T818-2000	M4x8
29	FRM-1120C-13-36	2	cam shaft	106032	
30	FRM-1120C-13	1	driven wheel seat (adjusting block)	106026	
31	FRM-1120C-12a	2	driven wheel shaft	106030	
32	FRM-1120C-12	2	driven wheel	106029	Includes #32, 33, 34
33	FRM-1120C-12	2	bearing (6201)	GB/T276-1994(6201)	Includes #32, 33, 34
34	FRM-1120C-12	2	circlip for hole	GB/T893.1-1986	Includes #32, 33, 34
35	Washer-M5x28		flat washer		M5x28
36	Screw-M4x8		screw	GB/T818-2000	M4x8
37			cam shaft seat	106033	

Figure 36. Sealer Body Front (2 of 2)

	Part #	Quantity	Description	Reference	Comments
38	FRM-1120C-13-38	2	cam	106031	
39		2	hexagonal bolt		
40	FRM-1120C-13-40	2	pressing plate for adjusting block	106027	
41	FRM-1120C-13-41	4	spacing ring of pressing plate	106028	
42	Screw-M4x8	1	screw	GB/T818-2000	M4x8
43	Screw-M4x8	1	screw	GB/T818-2000	M4x8
44	Screw-M4x8	1	screw	GB/T818-2000	M4x8
45	Screw-M4x8	1	screw	GB/T818-2000	M4x8
46	Washer-M5x16	2	flat washer	GB/97.1-2002	
47		1	spring seat	106034	
48	HL-M1120LD-21-48	2	bearing seat of upper pressing wheel		
49	Bearing_6900Z	2	bearing (6201)	GB/T276-1994(6201)	
50	HL-M1120LD-21-50	2	spacing ring of upper pressing wheel		
51	HL-M1120LD-21-51	2	gear of pressing wheel		
52	FRM-1120C-6-50-56	3	bearing seat	106008	Includes #18-20, 52-54
53	FRM-1120C-6-50-56	2	spacing ring of bearing	106009	Includes #18-20, 52-54
54	FRM-1120C-6-50-56	6	bearing (6201)	GB/T276-1994(6201)	Includes #18-20, 52-54
55	FRM-1120C-35B	5	gear	106014	
56		2	slide block	106005	
57	FRM-1120C-28-49	2	single slide block seat	106004	
58		2	hexagon nut		
59	Washer-M5x16	2	flat washer	GB/97.1-2002	
60		2	hexagon nut		
61	FRM-1120C-26	2	driving belt (#678)		
62	FRM-1120C-10	2	sealing belt (#1120)		
63	HL-M1120LD-26-2a	2	driving belt (#980)		Determine 2a or 2b
	HL-M1120LD-26-2b	2	driving belt (#960)		Determine 2a or 2b

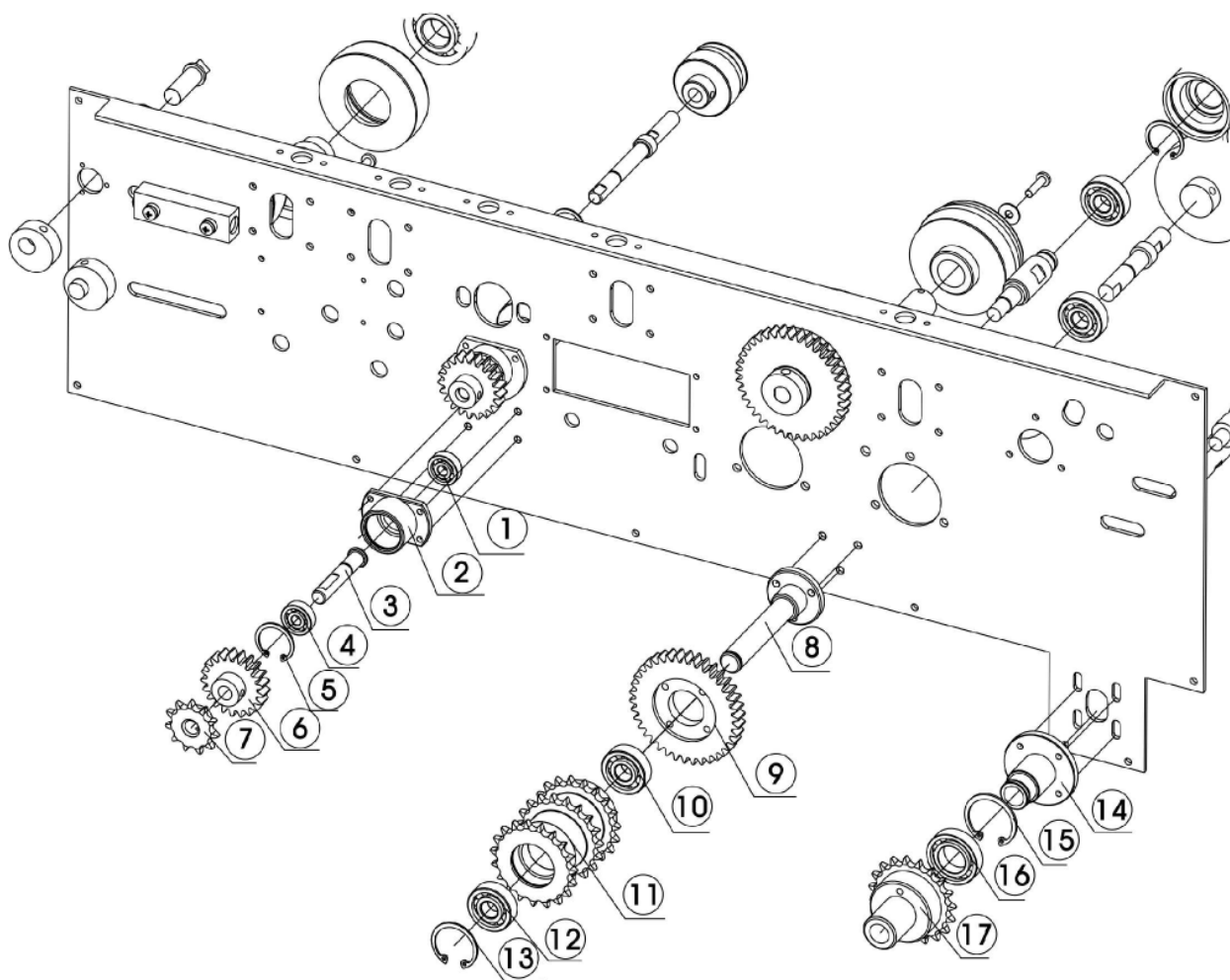


Figure 37. Sealer Body Back

Figure 38. Sealer Body Back

Item #	Part #	Description	Reference	Comments
1		bearing (626)	GB/T276-1994(626)	
2		bearing seat of drive sprocket		
3		drive sprocket shaft		
4		bearing (626)	GB/T276-1994(626)	
5		circlip for hole	GB/T893.1-1986	
6		gear of pressing wheel		
7		drive sprocket		
8		driving gear shaft		
9		driving gear		
10		bearing (6201)	GB/T276-1994(6201)	
11	HL-M1120LD-6-93	triple sprocket		
12	Bearing_6002Z	bearing	GB/T276-1994(6201)	
13	Circlip_32mm	circlip for hole	GB/T893.1-1986	
14	HL-M1120LD-72-14-17	sprocket shaft		Includes #14-17
15	HL-M1120LD-72-14-17	circlip for hole	GB/T893.1-1986	Includes #14-17
16	HL-M1120LD-72-14-17	bearing	GB/T276-1994(6201)	Includes #14-17
17	HL-M1120LD-72-14-17	drive sprocket		Includes #14-17

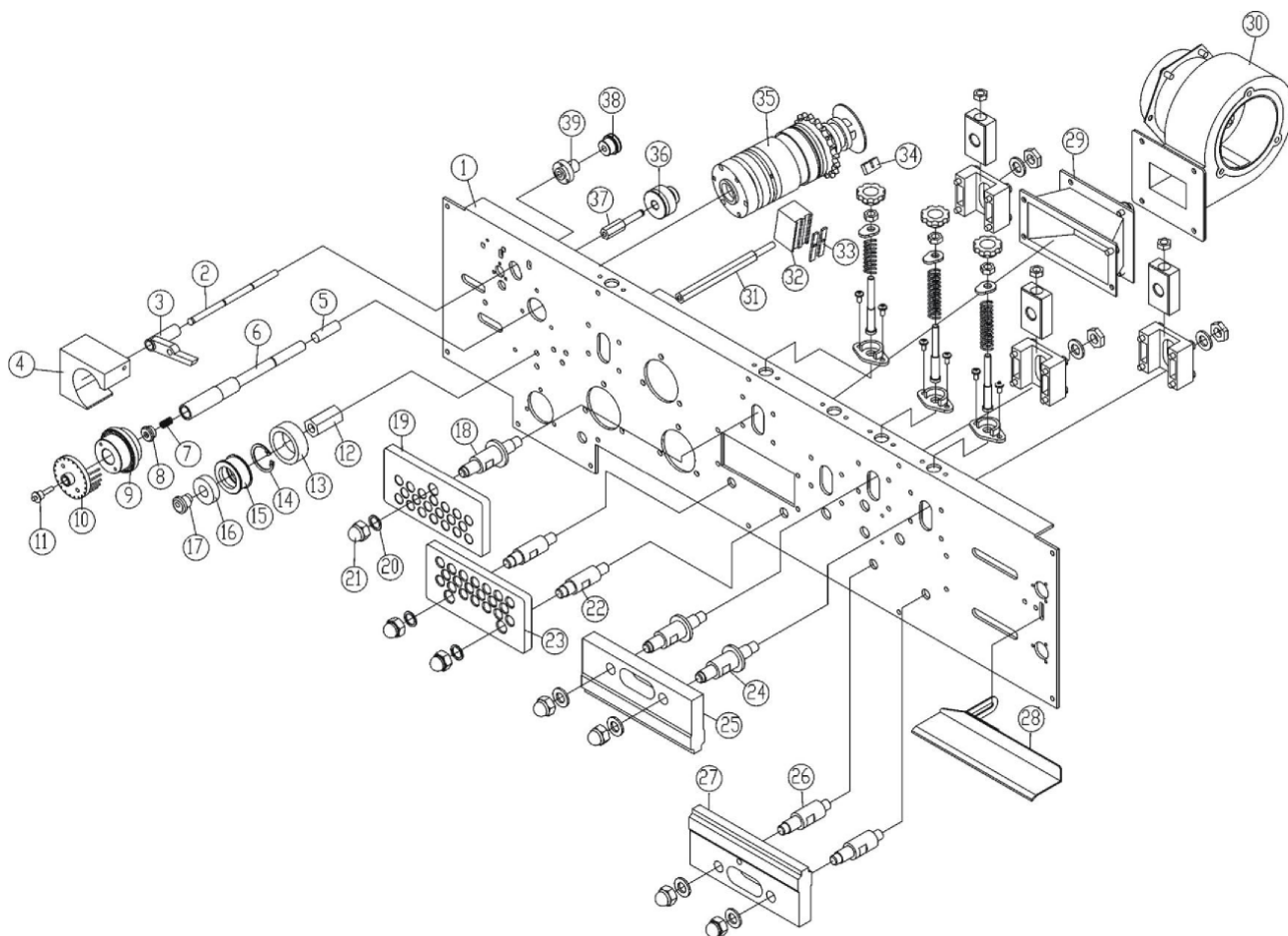


Figure 39. Heating/Cooling Blocks & Dry Ink Coding Function

Figure 40. Heating/Cooling Blocks & Dry Ink Coding Function

Item #	Part #	Quantity	Description	Reference	Comments
1		1	bottom board	106042	
2	BS-46	1	ink roller shaft	105036	
3	BS-62E-FRM	1	swing pole of ink roller	201007	
4	FRM-1120C-47	1	heating block of ink roller	201002	
5	BS-48C	1	heating pipe 110v/40w	921301	
6		1	printing wheel shaft	106071	
7	BS-48-7	1	spring of holding latch on printing wheel		
8	BS-48-8	1	cover for printing wheel shaft	201015	
9	BS-48B	1	printing wheel	201013	
10	BS-48A	1	printing wheel cover	201014	Includes #10, #11
11	BS-48A	1	holding latch for printing wheel	201016	Includes #10, #11
12		1	printing-silicone wheel shaft	201010	
13	BS-57A	1	silicone ring	910107	
14	BS-57	1	circlip for hole	GB/T893.1-1986	Includes #14-17
15	BS-57	1	core of silicone wheel	201011	Includes #14-17
16	BS-57	1	bearing	GB/T276-1994	Includes #14-17
17	BS-57	1	eccentric sleeve	201012	Includes #14-17
18	HL-M1120LD-8-18	1	upper cooling block shaft	201019	
19	FRM-1120C-8	2	upper cooling block	201015	Includes #19, #23, sold as pair
20		7	flat washer	GB/97.1-2002	
21		7	cap nut	GB/923-1988	
22	HL-M1120LD-8-22	1	lower cooling block shaft	106020	
23	FRM-1120C-8	1	lower cooling block	106016	Includes #19, #23, sold as pair
24	HL-M1120LD-9-24	2	upper heating block shaft	106021	
25	FRM-1120C-9A-SS	1	upper heating block	106017	Includes #25, #27, sold as pair
26	HL-M1120LD-9-26	2	lower heating block shaft	106022	
27	FRM-1120C-9A-SS	1	lower heating block	106018	Includes #25, #27, sold as pair
28					
29		1	wind catcher	106058	
30	FRM-1120C-32	1	fan		
31	BS-64B	1	support for brush	106073	
32	BS-64A	1	carbon brush holder	920423	
33	BS-64C	2	pressing plate of brush	201009	
	BS-64	2	carbon brush		Not shown
34	BS-65	1	groove sensor		
35	BS-139-FRM-1120LD	1	electromagnetic clutch assembly	A10501	
36	BS-54B	1	middle pulley	105032	
37	BS-54B-35	1	middle pulley shaft	105035	
38	BS-54C-34	1	ink roller shaft pulley	105041	
39	BS-54C	1	seat for ink roller swing pole shaft	201006	

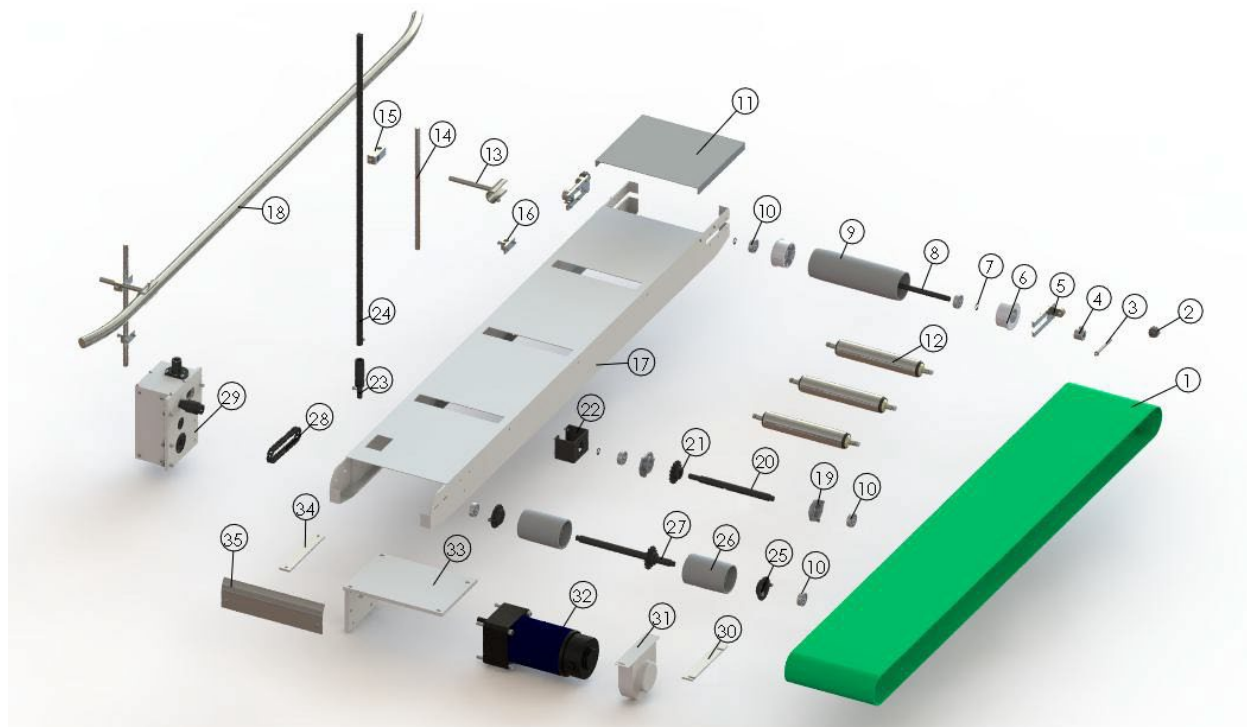


Figure 41. Conveyor Table

Figure 42. Conveyor Table

Item #	Part #	Quantity	Description	Comments
1	HL-M1120LD-1	1	Conveyor Belt	
2		2	Five-Star (Bakelite)Handle	M6×Φ30
3	HL-M1120LD-16	2	Adjustment Screw	Includes #3, 4
4	HL-M1120LD-16	2	Adjusting Ring	Includes #3, 4
5	HL-M1120LD-16-15	2	Conveyor Belt Adjust Seat	
6	HL-M1120LD-36	2	Rear Roller Plug	Includes #6, 7, 8, 9
7	HL-M1120LD-36	2	Circlip for Shaft (Φ12mm)	Includes #6, 7, 8, 9
8	HL-M1120LD-36	1	Rear Roller Shaft	Includes #6, 7, 8, 9
9	HL-M1120LD-36	1	Rear Roller	Includes #6, 7, 8, 9
10		6	Deep Groove Ball Bearing	6201-2RS
11	HL-M1120LD-15	1	Working Table	
12	HL-M1120LD-36.12	3	Intermediate Roller (Long) Assembly	
13	HL-M1120LD-18	2	Baffle Support Rod	Includes #13, 14, 15, 16, 18
14	HL-M1120LD-18	2	Guide Rod	Includes #13, 14, 15, 16, 18
15	HL-M1120LD-18	2	Support Rod Support	Includes #13, 14, 15, 16, 18
16	HL-M1120LD-18	2	Guide Rod Support	Includes #13, 14, 15, 16, 18
17	HL-M1120LD-20-17	1	Conveyor Table	
18	HL-M1120LD-18	1	Baffle Support	Includes #13, 14, 15, 16, 18
19	HL-M1120LD-41	2	Conveyor Table Middle Shaft Bearing Seat I	Includes #29, 20, 21, 22
20	HL-M1120LD-41	1	Conveyor Table Middle Shaft	Includes #29, 20, 21, 22
21	HL-M1120LD-41	2	Conveyor Table Chain Wheel	Includes #29, 20, 21, 22
22	HL-M1120LD-41	1	Middle Shaft Pad	Includes #29, 20, 21, 22
23	HL-M1120LD-40A	1	Half-Universal Joint Assembly	
24	HL-M1120LD-72_shaft	1	Vertical Shaft	
25	HL-M1120LD-37	2	Front (Left) Roller Bearing Seat	Includes #25, 26, 27
26	HL-M1120LD-37	2	Front (Left) Roller	Includes #25, 26, 27
27	HL-M1120LD-37	1	Front (Left) Roller Shaft	Includes #25, 26, 27
28	FRM-1120LD-38-41	1	Three-joint Chain	(06B-1×42L) 42 segment
29	HL-M1120LD-30	1	Gear Box	
30	HL-M1120LD-1-30	1	Front Baseplate	
31		1	Motor Safety Cover	
32	HL-M1120LD-29	1	Reducer Motor	ask distributor which motor
	HL-M1120LD-29-AC	1	AC Motor	ask distributor which motor
33		1	Reducer Installing Board	
34	HL-M1120LD-1-34	1	Rear Subplate	
35	HL-M1120LD-1-1	1	Outfeed Board	

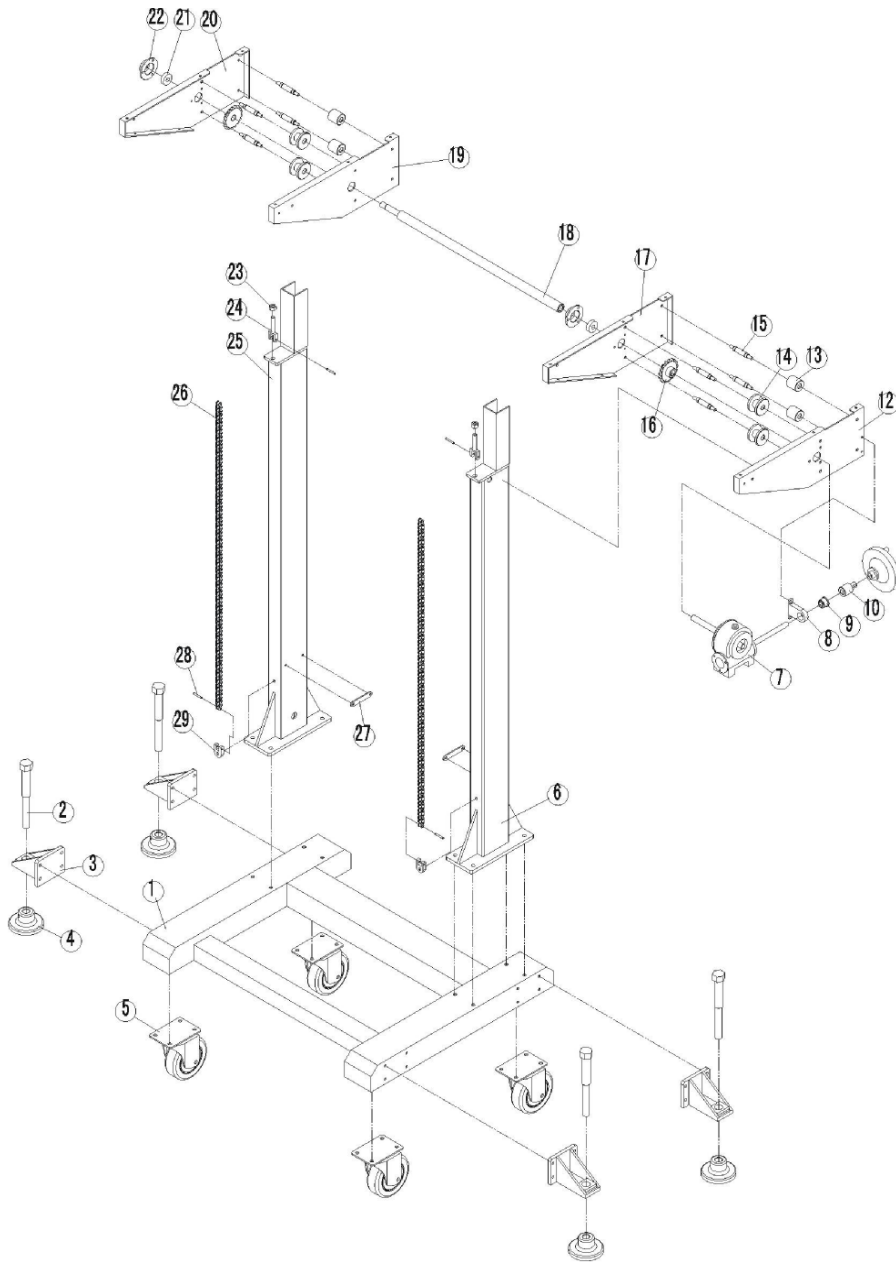


Figure 43. Sealer Rack

Figure 44. Sealer Rack

Item #	Part #	Quantity	Description	Reference	Comments
1		1	chassis		
2	HL-M1120LD-94	4	foot plate bolt		Includes #2, #4
3		4	foot plate support		
4	HL-M1120LD-94	4	foot plate		Includes #2, #4
5		4	caster	910205	
6		1	right upright post		
	HL-M1120LD-29	1	motor		Not shown
	BS-29A_HL-M1120LD	2	motor brush		Not shown
7	HL-M1120LD-30	4	wormgear case assembly		
8	HL-M1120LD-72-8	1	worm support seat	11521040410	
9	HL-M1120LD-72-9	1	worm bushing	111078	
10	HL-M1120LD-72-10	1	connecting head of handle	111086	
11	HL-M1120LD-90	1	handwheel	930107-2	
12	HL-M1120LD-72-12	1	right-out support plate for conveyor table		
13	HL-M1120LD-72-13	4	rear roller	111071	
14	HL-M1120LD-72-14	4	front roller	111070	
15	HL-M1120LD-72-15	8	lifting roller shaft	111072	
16	HL-M1120LD-72-16	2	lifting sprocket	111080	
17	HL-M1120LD-72-17	1	right-inner support plate for conveyor table		
18	HL-M1120LD-72-18	1	lift sprocket shaft	111079	
19	HL-M1120LD-72-19	1	left inner support board of conveyor table		
20	HL-M1120LD-72-20	1	left out support board of conveyor table		
21	HL-M1120LD-72-21	2	shaft sleeve of lift sprocket	111082	
22	HL-M1120LD-72-22	2	bearing seat for lift sprocket	111081	
23	HL-M1120LD-72-23	2	nut	GB/T41-2000	
24	HL-M1120LD-72-24	2	screw rod	111085	
25		1	left upright post		
26	HL-M1120LD-72-26	2	chain	930603	
27		2	limiting plate for conveyor table		
28	HL-M1120LD-72-28-29	4	chain pin	111084	Includes #28, #29
29	HL-M1120LD-72-28-29	2	chain seat	111083	Includes #28, #29

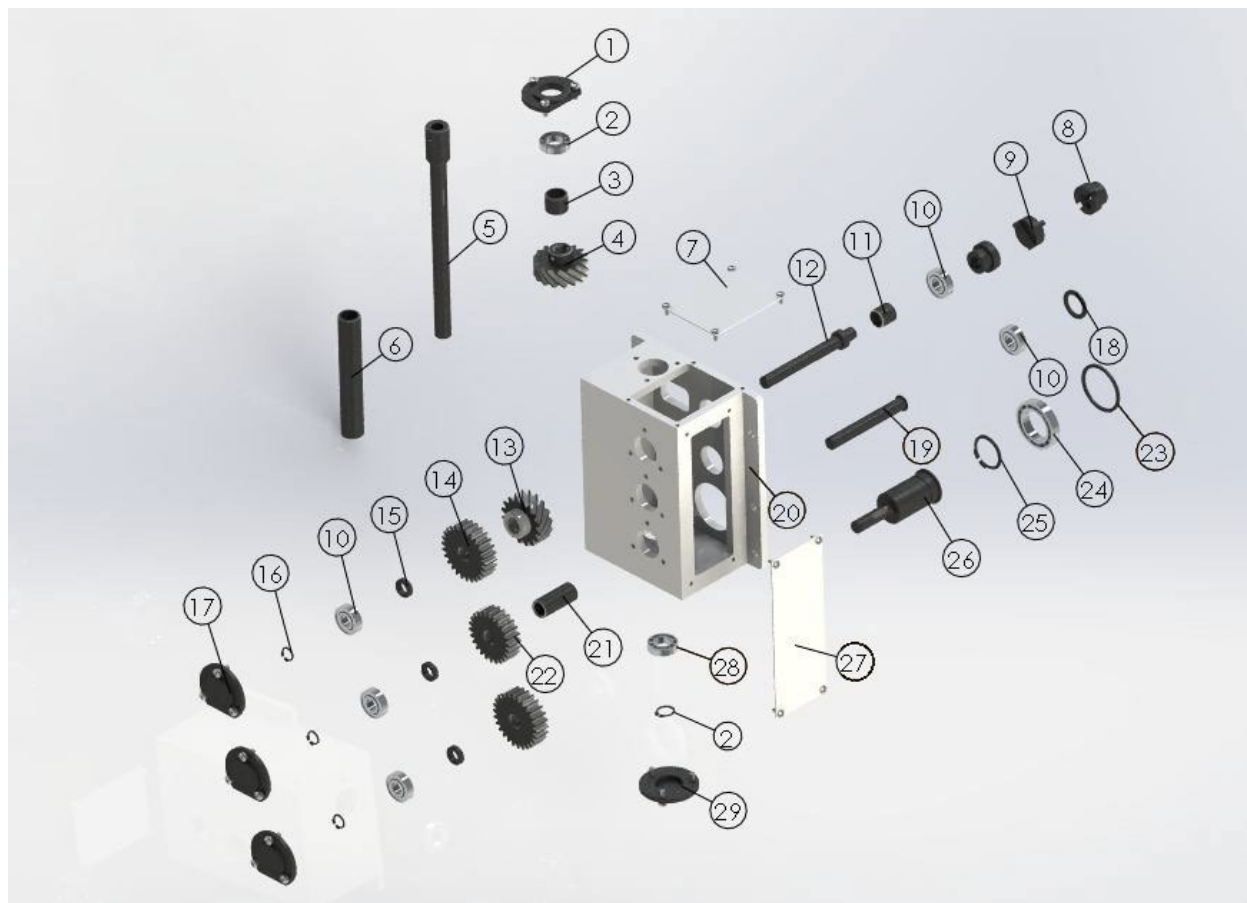


Figure 45. Turbocase (Gear Box Assembly)

Figure 46. Turbocase (Gear Box Assembly)

Item #	Part #	Quantity	Description	Comments
	HL-M1120LD-30_Gen1.0	1	Gear Box Assembly (Turbocase)	Includes #1-29
	HL-M1120LD-30_Gen2.0	1	Gear Box Assembly (Turbocase)	Includes #1-29
1	HL-M1120LD-30-1	1	Vertical Shaft Bearing Seat	
2	Bearing_61902ZZ	2	Deep Groove Ball Bearing	61902ZZ (φ15 x φ28 x 7)
3	HL-M1120LD-30-3	1	Vertical Shaft Spacer(2)	
4	HL-M1120LD-30-4	1	Helical Gear I	
5	HL-M1120LD-30-5	1	Gear Box Vertical Shaft	
6	HL-M1120LD-30-6	1	Vertical Shaft Spacer (1)	
7		1	Gear Box Upper Cover	
8		2	Coupling I	
9		1	Coupling II	
10		5	Deep Groove Ball Bearing	
11		1	Middle Shaft Spacer Ring I	
12		1	Gear Box Middle Shaft	
13		1	Helical Gear II	
14		2	Gear	
15		3	Reducer Connect Shaft Spacer II	
16		3	Circlip for Shaft	
17		3	Bearing Seat I	
18		1	Medium Gear Shaft Spacer I	
19		1	Medium Gear Shaft	
20		1	Gear Box	
21		1	Medium Gear Shaft Spacer II	
22		1	Medium Gear	
23		1	Reducer Connect Shaft Spacer I	
24		1	Deep Groove Ball Bearing	
25		1	Circlip for Shaft	
26	HL-M1120LD-30-26	1	Reducer Connect Shaft	
27		1	Gear Box Side Cover	
28		1	Circlip for Shaft	
29		1	Bearing Seat II	

Troubleshooting

Changing Emergency Stop

Always unplug the unit from the power source when making adjustments.*

Problem: The emergency stop (Part #BS-22A_Gen3.0) needs to be replaced



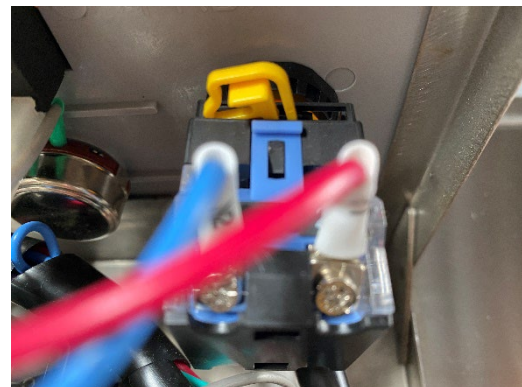
For our smaller band sealers (CBS-880, FR-770, HL-M810, FRM-1010 units), remove the control panel plate from the band sealer. Place the control panel on top of the band sealer for better viewing.

For our larger band sealers (FRM-1120C, FRS-1120W, HL-M1120LD units), remove the control box cover to access the back of the control panel.

1. To remove Gen 3.0 emergency stop, click the yellow tab in release position.

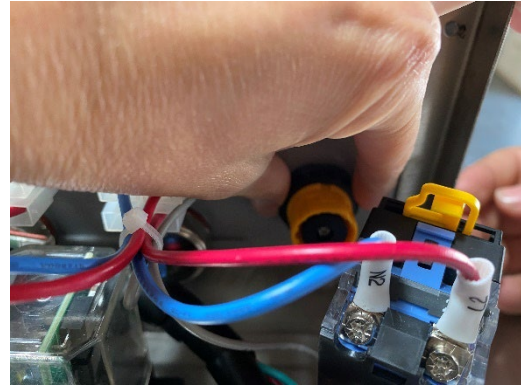
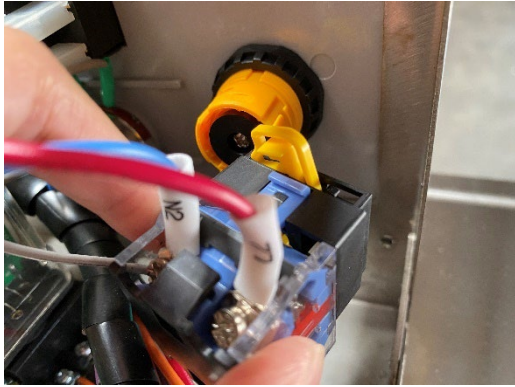


Locked position



Release Position

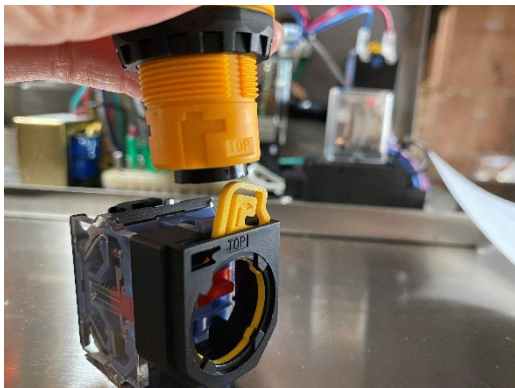
2. Remove the contact block from the push button. The push button can be removed by loosening the black nut.



3. Make note of the wiring on the emergency stop and reconnect the new emergency stop. Blue wires connect to 11 and 12 and the red wires connect to 21 and 22



4. Connect the contact block to the push button. Match the two pieces where they are labeled top. Push the yellow tab into the locked position.



Unable to Set Temperature



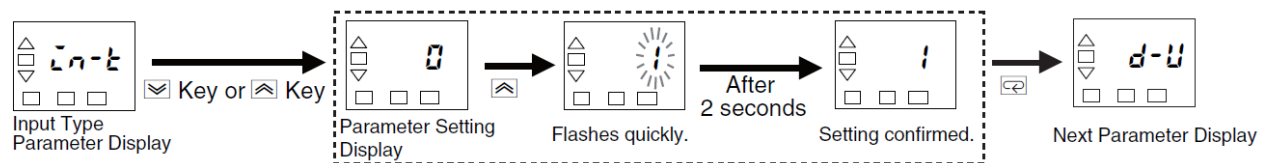
Scan QR Code for Video Demo



If operator is unable to set the temperature or is finding the temperature settings inaccurate, we suggest resetting the temperature controller to the default settings (Figure 47). Please follow the following steps:

- ❖ Hold the  for at least three seconds.
- ❖ Press the  or  key at the display for the parameter for which the setting is to be changed. The parameter setting display will appear. Use the  or  key to change the setting. Example: Changing the Input Type from 0 to

1 is below:



- ❖ Enter  to move on to the next parameter display.
- ❖ To save the settings, hold  again for more than three seconds. The temperature controller will automatically restart and save the settings.
- ❖ **Please note: This temperature controller can only be set to Celsius. If you try and change the temperature unit to F, the temperature controller will not function properly.**

Sheet 1: Initial menu		
data	note	Set value
In-t	Input type	0
d-U	Temperature unit	℃
EntL	Control mode PID or ON/OFF	PId
CP	Control cycle	3
orEu	Forward / reverse operation	or-r

Figure 47. Default Setting Parameters

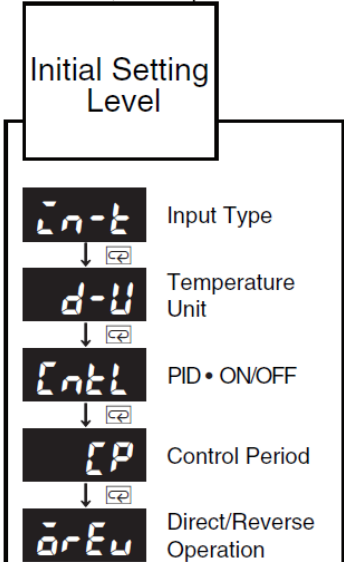


Figure 48. Parameter Displays

Printing Wheel Adjustments

Problem: Print wheel on the band sealer rotates more than once.

Possible Cause: Electromagnetic clutch on the back of the unit and groove sensor are not aligned properly. The flat panel of the electromagnetic clutch signals the groove sensor to stop the print wheel rotation.

1. We suggest the following steps:
2. Loosen the nut as shown in [Figure 49](#). This will allow the carbon brush holder and groove sensor some movement.
3. Push the groove sensor closer to the electromagnetic clutch
4. Re-tighten the nut

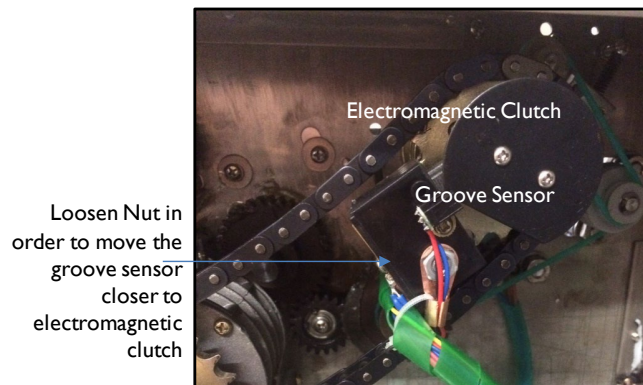


Figure 49. Incorrect position of groove sensor and electromagnetic clutch

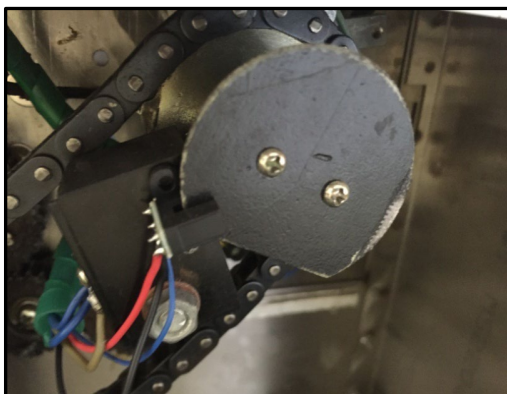


Figure 50. Correct position of groove sensor and electromagnetic clutch

Problem	Possible Causes	Solution
Sealing belt is off tracking.	Driving wheel shaft is not parallel to driven wheel shaft	Adjust two adjusting screws on the adjusting block seat (Part# FRM-1120LD-13)
Sealing belts are tearing	1. Too much tension on sealing belt 2. Sealing belt is off tracking 3. Creases on the sealing belt 4. Residual film or other debris attached to the sealing belt	1. Adjust the vertical adjusting screw on driven wheel seal to decrease tension on sealing belt 2. see above 3. When installing belt, make sure no creases are found on belt 4. Clean surface of belt with cloth
Seal is crumpled and film sticks to sealing belts	1. Temperature is too high 2. Guide belt is not correctly in place 3. Plastic melted on the sealing belt	1. Reduce temperature 2. Adjust guide belt 3. Clean or replace sealing belt If any plastic melts on the sealing belt, your bags will stick to the melted plastic
Embossing is not clear	1. Embossing roller is worn out 2. Pressure spring on embossing roller needs to be tightened	1. Replace embossing roller 2. Adjust the embossing roller spring (Part# FRM-1120C-28B)
Material will not pass through sealing blocks	Clearance between heating blocks or cooling blocks may be too small	Adjust the clearance between blocks by adjusting the springs and stopping flakes found above the blocks
Conveyor belt is off tracking	Driving roller shaft is not parallel to the driven roller shaft	Adjust using the conveyor belt adjustment (Part# FRM-1120LD-16)
Conveyor and sealing belt are not moving at same speed	Not enough tension on conveyor belt	1. Tighten the chain of driving roller shaft (front shaft) and middle shaft. (Parts # FRM-1120LD-37 and FRM-1120LD-41) 2. Tighten the conveyor belt
Temperature doesn't rise or cannot be controlled	1. Heat switch is damaged 2. Heater (BS-9B) is damaged 3. Temperature Controller 4. Coupling	Replace: 1. Heat switch (BS-22-Large) 2. Heater (BS-9B) 3. Temperature Controller 4. Thermocouple (FR-1120LD-34)

Problem	Possible Causes	Solution
Printing wheel does not rotate	1. Sensor is blocked 2. Sensor is not clean and eye is blocked by dust	1. Make sure sensor is not blocked 2. Clean sensor 3. Replace PCB (BS-52C)
Printing wheel does not stop rotating	1. Sensor (groove) is damaged or dirty 2. Photoelectric sensor is damaged or dirty 3. Main control PC Board is damaged	1. Replace or correct position of the groove sensor or clean its surface (BS-65) 2. Replace or clean photoelectric sensor (BS-60) 3. Replace PC Board (BS-52C)
No heat on the ink heating block	1. Heating element in heating block is damaged 2. Heating PCB is damaged 3. Potentiometer w/ PC Board (BS-50A) is damaged 4. Carbon brush is not in place 5. Carbon brush is damaged	1. Replace element (BS-48C) in heating block 2. Replace PCB (BS-50A) 3. Replace potentiometer with PC Board (BS-50A) 4. Adjust and tighten nut on carbon brush seat 5. Replace carbon brush
Temperature of heating block for ink roller cannot be regulated	Relay for temperature control PCB is damaged	Check and replace temperature control PCB (BS-50A)
Printing position cannot be regulated	1. Tighten screw on printing wheel 2. Coding seat potentiometer may be damaged	1. Tighten screw on printing wheel. 2. Replace coding seat potentiometer (BS-51)
Motor runs at a high speed and cannot be regulated	Speed controller has malfunctioned	Replace the speed controller (BS-52A)
Power, heater, and or fan switches do not light up	1. No AC Voltage 2. Open Fuse 3. Lamp is damaged	Check power source / power cord Connect the power Replace the fuse Replace the lamp

Problem	Possible Causes	Solution
Machine does not run	1. Board for speed regulation is abnormal 2. Doesn't connect well 3. Brushes in the motor are too short because of friction	1. Replace the speed board (BS-52A) 2. Tighten the connecting screws 3. Replace motor brushes (BS-29A) If the temperature controller works and the power lamp illuminates but the motor does not move, start off by checking the motor and turbocase connection. Remove the back of the machine and you will see bushing where the motor connects to the gear box. Ensure the bushing is not broken. There is also a set screw that connects the bushing to the gear box / motor shafts. Ensure that these are tight so that when the motor turns, the turbocase turns as well. If the turbocase is noisy before it stopped working, the gear box could be broken inside. Lack of oil could cause this. If the lamp illuminates and the motor does not turn, the motor speed controller may need to be replaced.

Spare Parts List

Spare Parts List

Included with your band sealer are the following parts. Please note that spare parts included with your band sealer are subject to change without notice.

- ❖ Typeset Box – Typesets – 18PT Font
 - ❖ 5 – Number 0s
 - ❖ 6 – Number 1s
 - ❖ 6 – Number 2s
 - ❖ 4 – Number 3s
 - ❖ 3 – Number 4-9s
 - ❖ 1 – EXP, MFD
 - ❖ 2 – Silicone Pins (Part #BS-59)
 - ❖ 1 – Tweezers
 - ❖ 1 – Allen Wrench
- ❖ Leg Supports
 - ❖ 4 Screws – 25mm x 187mm
 - ❖ 4 Washers – 37mm
 - ❖ 4 Nuts – 26mm
 - ❖ 4 Nuts – 26mm
 - ❖ 4 Leg Supports
- ❖ Power Cord
- ❖ 10 – PTFE Sealing Belts (Part# FRM-1120C-10)
- ❖ 4 – Drive Belts - #980 (Part#HL-M1120LD-26-2a) or #960 (Part#HL-M1120LD-26-2b)
(check with your distributor to determine which version)
- ❖ 4 – Drive Belts - #678 (Part #FRM-1120C-26)
- ❖ 2 – Heating Element for Ink Wheel Block (Part # BS-61)
- ❖ 1 – Speed Adjusting PC Board (Part #BS-52A) – not included if you have an AC motor unit.
- ❖ 1 – Central Circuit PC Board (Main Control PC Board) (Part #52C)
- ❖ 1 – Ink Temperature Potentiometer with Heat PC Board (Part #50A)
- ❖ 1 – Rubber Wheel (Part#FRM-1120C-2)
- ❖ 4 – O-Ring – 1.76” / 50mm (Part#BS-53)

- ❖ 4 – O-Ring – 2.05” / 60mm (Part #BS-54)
- ❖ 1 – Silicone Ring (Part# BS-57A)
- ❖ 1 – Ink Roller Holder (Part# BS-58)
- ❖ 2 – Ink Rollers, 15mm (Part#IT-IR-15-Blk)
- ❖ 2 – Silicone Pins (Part #BS-59)
- ❖ 1 – Groove (Trough) Sensor (Part #BS-65)
- ❖ 2 – Carbon Brush for Printer (Part #BS-64)
- ❖ 1 – Philips Screwdriver
- ❖ 1 – Flat Screwdriver
- ❖ 2 – Allen Wrench (3mm and 5mm)
- ❖ 1 – Wrench

Quality Control Testing

Our band sealers are manufactured in a facility which is certified in accordance with ISO 9001:2008. In addition, we quality test all of our band sealers in our facility following a rigorous and exacting standards to ensure that the product you purchased is a high quality reliable machine.

✓ Steps	Description
	Inspect all wiring on the unit, nothing is loosely attached. Make sure all wires are connected correctly.
	Make sure all connections are tight and properly mounted. (Ex: PC Board, Relay)
	Check parts to ensure they are in proper working order (ex: wheels, belts, knobs, etc)
	CBS-880 only - Attach the conveyor to the body via the drive shaft (Part #40). Detach after testing.
	Turn on machine - start, seal, fan, printer Check all knobs to make sure they start and end in the correct position
	Make adjustments as necessary if there is any unusual noise. Noise should be under 80db.
	Check fan - There should be air coming out of the cooling blocks
	Check motor - motor brushes should be held in tightly
	Check conveyor belt to make sure the belt is running smoothly and evenly
	Run machine for at least 20 minutes - after the seal temperature has been reached, seal bag sample to ensure good quality seal
	<u>Band Sealers w/ Printing Option:</u> Printing - make sure ink heating block, ink printing wheel are at optimal heat temperature
	Sensor and Coding Seat - test the sensor and coding seat are working properly; make adjustments as necessary
	Clean machine
	Enter serial # of the unit in the manual
	Repackage sealer w/ QC form, sealed bag / printed sample and manual.

Date:
Technician:

